



SciTechperience



SciTechperience Internship Program Final Report 2012

Minnesota High Tech Association
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SciTechsperience Internship Program Final Report 2012

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EXECUTIVE SUMMARY

There is a growing need across the country for qualified workers in science, technology, engineering and math (STEM) fields. Minnesota is no exception, needing 188,000 STEM workers by 2018.¹ Minnesota must compete with other states to attract and retain STEM workers and companies as well as the economic growth and high-quality jobs they create.

SciTechsperience is a paid internship program that matches college students studying STEM disciplines with small, for-profit companies in Minnesota with fewer than 100 employees. Hiring companies receive a dollar for dollar matching stipend for the intern's wages. The match is capped at \$2,500.

SciTechsperience was an outcome of the Minnesota Science and Technology Authority's (MnSTA) 2011 strategic plan. The Legislature established the Minnesota Science and Technology Authority at the request of the business community to develop and implement a statewide technology based economic development plan led by industry and academia in partnership with government.

Based on the MnSTA strategic plan, an RFP was created for SciTechsperience. It listed several goals for the program including:

- Build a competitive STEM workforce by retaining talented STEM students in Minnesota.
- Provide a paid work experience for students in their field of study, which, when used in conjunction with a college degree, will help them gain full-time employment in a STEM field.
- Assist small for-profit companies with research and development efforts and employee recruitment.
- Attract new and retain existing high tech companies.
- Place a significant number of participating students in gainful employment following graduation with a Minnesota for-profit company.²

In late 2011, the Minnesota High Tech Association (MHTA) was awarded a \$150,000 one-time MnSTA grant to build the SciTechsperience pilot with enough matching funds to support 40 internships. Beginning in January 2012, MHTA built the program from scratch using similar internship programs in Ohio³ and Nebraska⁴ as a model. On February 3, 2012 – only four weeks after work began – the SciTechsperience program was launched.

Positive response to SciTechsperience was immediate from both students and companies. The response was so favorable that it prompted MnSTA to add matching funds for 20 additional internships in March, bringing the new total to 60. Ten internships were reserved for companies in Greater Minnesota.

The number of student applicants reached 246. They came from communities across the state and represented a broad range of STEM fields from two- and four-year colleges and universities in Minnesota and beyond. The pool of students also represented some of Minnesota's brightest talent, with an average GPA of 3.3.

Geographic Location of Students	# Student Applicants	# Students Hired
Minneapolis and St. Paul	51	16
Suburbs	134	30
Greater Minnesota	45	15
Out of State (attend school in MN)	16	6
Total	246	67

¹ *Minnesota's K-12 STEM Ed Report Card 2011; Jobs & Economic Prosperity Through STEM Education* by The Alliance for Science & Technology Research in America (ASTRA), p.1

² MN Science and Technology Internship Program "SciTechsperience" State Fiscal Year 2012 Request for Proposals, p.3

³ Ohio's STEM internship program placed 692 interns at 167 companies in FY12 receiving \$2.6 million in state funding.

⁴ Nebraska's internship program is funded at \$1.5 million annually matching 264 students so far with STEM companies.

Applicants by College/University System	# Student Applicants	# Students Hired
University of Minnesota	79	29
MN State Colleges & Universities	72	14
Private Colleges	67	13
Out of State Colleges (residents of MN)	26	10
For-profit Colleges	2	1
Total	246	67

Sixty companies with fewer than 100 employees applied to the program from the following industries (the average company size was 22 employees):

- Aerospace and Defense (2 applicants);
- Agriculture, Food, and Forestry (2 applicants);
- Biotechnology, Life Sciences and Health IT (22 applicants);
- Fuels, Energy, and Energy Management (4 applicants);
- IT/Computer Technology (21 applicants); and
- Mining, Materials, Manufacturing and Processing (9 applicants).

Over 130 internship openings were created. Hiring managers were given profiles of the students enrolled in the program and given full control on hiring decisions. Matching stipends were given on a first come, first hired basis.

Geographic Location of Companies	# Companies Applicants	# Positions Posted	# Students Hired
Minneapolis/St. Paul	16	42	28
Suburbs	34	65	25
Greater Minnesota	10	24	14
Total	60	131	67

By May 18, 2012, all 60 internships accompanied by matching stipends were filled. Seven additional interns were placed after the matching stipends ran out, for a total of 67 internships. This represents a 67% increase over the original goal of forty. Greater Minnesota companies in Duluth, Alexandria, Isanti, Pine River, St. Cloud, and Northfield hired 14 of the 67 interns. Seventy-nine percent of the internships were full-time positions, with the remaining 21% of interns hired for part-time work.

The success of the program was also evident in the quality of the internship experiences. Mark Wuollet, co-owner of Selkea Systems, LLC in Minneapolis remarked that:

“We are a startup company that had just established a new Application Development Lab in Minneapolis. The students that came through your program were great candidates and the two interns we chose performed well. **They definitely helped meet our needs as a growing organization.** I also believe that they got a very well-rounded experience. We would definitely consider participating in the program again.”

Students experienced benefits through the program as well. Kevin Clark, a senior majoring in chemistry at Gustavus Adolphus College in St. Peter, said:

“I was fortunate enough to receive diverse experiences in analytical chemistry not only in the laboratory, but the workplace in general. Having never worked at a corporation before, I was introduced to its fast-paced and demanding environment. Furthermore, I became proficient with the instruments and software tools associated with analytical chemistry. Having a slew of available [internship] positions at my fingertips was more beneficial than I can explain. **Thank you for connecting me with my future.**”

A program survey was conducted in mid-August. Fifty-two percent of the students responding to the survey reported that their SciTechsperience summer internship led directly to extended employment in either a part-time or fulltime capacity beyond the original term of the internship. Three students received offers of full-time employment, with one additional student starting a fulltime job at Boston Scientific. These figures are a good indication of the success of the program given that 15% of the original terms of the internships were still underway at the time of the surveys and a majority of the interns (63%) are still in the process of completing their degrees.

Based on our survey, the top two reasons given for hiring an intern through the program were (1) receiving a matching stipend (70%) and (2) to have help with a short term project (40%). In other words, many of these small companies were not necessarily in a position to bring on additional fulltime staff, which is why the internship option was appealing to many of them in the first place. Another reason the SciTechsperience program was so attractive to companies was the recruiting and screening service provided by MHTA. This leg work was an enormous help to small companies because they often don't have the resources to handle the necessary recruiting and screening of intern applicants that larger companies do.

Despite the tremendous success of the SciTechsperience pilot, the future of the program is uncertain. The Minnesota Science and Technology Authority did not receive ongoing funding during the 2012 legislative session to ensure the SciTechsperience program is able to be maintained or grow.

MnSTA has committed its remaining 2011 appropriation (\$30,000) to the SciTechsperience program for 2013. In addition, MHTA has secured some private sector and foundation funding which will maintain the program on a smaller scale. MHTA remains committed to growing the program to build Minnesota's STEM workforce pipeline and support small tech companies. However, after dozens of private foundation applications and corporate asks, it is clear that the SciTechsperience program will only be sustained through ongoing state funding.

The SciTechsperience Internship Program Full Report

THE NEED | Minnesota's growing workforce challenge in STEM fields

Every day, we see news stories about the urgent need for more qualified workers in science, technology, engineering and math (STEM) fields in the United States. The growth of the science and technology sector, along with the oncoming “silver tsunami” – the number of upcoming retirements in the baby boom generation – has created great demand for a diverse and well-educated STEM workforce. In Minnesota, 188,000 jobs will need to be filled in STEM fields by 2018.⁵ Minnesota is competing with other states to attract STEM workers and companies because of the high-quality, well-paying jobs they create. These jobs strengthen communities by helping to spur additional economic development.

In 2010, the Minnesota Legislature established the Minnesota Science and Technology Authority at the request of the business community to develop and implement a statewide technology based economic development plan led by industry and academia in partnership with government. The Minnesota Science and Technology Authority (MnSTA) Advisory Commission, in developing strategies to foster a business climate that supports science and technology innovation, recognized that a top priority in improving Minnesota's competitiveness was to enhance its talent and workforce. The concept for a STEM internship program was created as a result of the MnSTA strategic planning process and named SciTechsperience. In late 2011, the Minnesota High Tech Association (MHTA) was awarded a \$150,000 one-time grant to build and administer the SciTechsperience pilot. Modeled on larger state-funded internship programs in Ohio⁶ and Nebraska,⁷ SciTechsperience was created specifically to train, attract and retain STEM talent in Minnesota.

Purpose and Goals of the State Sponsored Internship Program

SciTechsperience was designed to “offer STEM college students an opportunity to experience first-hand processes, strategies and organizational structures in for-profit companies around the state” and “expose college students to future work experiences and create a pool of talented workers to support Minnesota companies commercializing new technology, products and processes.”⁸

MnSTA's goals for the SciTechsperience program included:

- Build a competitive STEM workforce by retaining talented STEM students in Minnesota.
- Provide a paid work experience for students in their field of study, which, when used in conjunction with a college degree, will help them gain full-time employment in a STEM field.
- Assist small for-profit companies with research and development efforts and employee recruitment.
- Ultimately attract new and retain existing high tech companies.
- Place a significant number of participating students in gainful employment following graduation with a Minnesota for-profit company.⁹

SciTechsperience | Definition and Eligibility Criteria

SciTechsperience is a paid internship program that matches STEM college students with on-the-job training opportunities in Minnesota companies with fewer than 100 employees. SciTechsperience recruits talented STEM students statewide and assists small businesses in paying the interns through a dollar for dollar matching stipend of 50% of the interns' wages. The match is capped at \$2,500.

⁵ *Minnesota's K-12 STEM Ed Report Card 2011; Jobs & Economic Prosperity Through STEM Education* by The Alliance for Science & Technology Research in America (ASTRA), p.1

⁶ Ohio's STEM internship program placed 692 interns at 167 companies in FY12 receiving \$2.6 million in state funding.

⁷ Nebraska's internship program is funded at \$1.5 million annually matching 264 students so far with STEM companies.

⁸ MN Science and Technology Internship Program “SciTechsperience” State Fiscal Year 2012 Request for Proposals, p.3

⁹ MN Science and Technology Internship Program “SciTechsperience” State Fiscal Year 2012 Request for Proposals, p.3

Eligibility requirements

Companies had to meet the following criteria in order to participate in the program and receive a matching stipend:

- A for-profit company eligible to conduct business in Minnesota;
- Fewer than 100 employees;
- Provide hands-on experience in the student's field of study within the company's industry; and
- Be doing business in one of the following industries:
 - Aerospace and Defense,
 - Agriculture, Food and Forestry,
 - Biotechnology, Life Sciences and Health IT,
 - Fuels, Energy and Energy Management,
 - IT/Computer Technology, or
 - Mining, Materials, Manufacturing and Processing.

Students had to meet the following criteria in order to become part of the intern talent pool:

- A Minnesota resident or attending school in Minnesota and at least 18 years of age;
- In good academic standing (2.5 or greater GPA);
- Halfway through a degree program, i.e. in the second year of a technical or community college program or a college junior, college senior, graduate student or doctoral candidate; and
- Enrolled in an accredited U.S. college and in an approved high-tech curriculum in one of the following fields:
 - Biological Sciences:
 - Bioinformatics, Biomechanics,
 - Genomics, Proteomics, Microbiology,
 - Neurobiology,
 - Catalysis & Synthesis,
 - Chemistry,
 - Computer Science,
 - Environmental Science,
 - Imaging & Navigation,
 - Informatics & Data Management,
 - Engineering: Aerospace, Agricultural, Biomedical, Chemical, Civil, Computer, Electrical, Manufacturing, Mechanical, Software,
 - Material and Physical Sciences,
 - Mathematics,
 - Nanotechnology, or
 - Robotics & Automation.

PROGRAM DEVELOPMENT | How the program came together

After being awarded the grant to develop the SciTechsperience pilot in late 2011, MHTA hired a program coordinator to manage the program beginning in January 2012. The program processes and tools were built from the ground up using state-funded internship programs in Ohio and Nebraska as models. MHTA quickly developed and launched SciTechsperience in just four weeks and placed the first intern in early March.

The Approval Process

Upon completing an online application, students and companies were screened to make sure they met the eligibility requirements. As position descriptions were approved, the job openings were posted to the online job board and students were notified of new openings. Students were able to apply for specific internships in their field of study. Similarly, as students were approved to participate in the program, companies received an email highlighting the newest applicants with student profiles sorted by degree/major. Companies reviewed the pre-sorted resumes, interviewed applicants and hired the best qualified intern to meet their individual needs.

Promoting SciTechsperience

The pent up demand for this type of program was evident in the large number of student and company applicants. Students have a strong desire to obtain real-world work experience and due to increasing tuition costs can't afford to participate in unpaid opportunities. Small companies are seeking highly skilled individuals to bring new ideas to the table, but often can't afford to bring in the new talent they need. Our outreach efforts

to match these motivated students and innovative companies included direct promotion of the program in a number of ways including:

- Press releases, websites and e-newsletters from MHTA and MnSTA;
- Online banner ads and radio spots (15 second sponsorship spots on *Marketplace Tech Report*) on Minnesota Public Radio, an opportunity courtesy of Thompson Reuters;
- Posting on the Life Science Alley LinkedIn group;
- Hosting information tables and giving presentations at college, industry and MHTA events;
- Program postings on college job boards including *LandIt.org*, the Private Colleges job board, and the University of Minnesota’s *GoldPass* system;
- Targeted outreach to colleges and university STEM programs including list serves, career centers, and STEM departments;
- Emails to more than 100 businesses who expressed interest in the program through a 2011 MnSTA survey;
- Letters, fliers and news releases sent to all Minnesota State and Federal Legislators encouraging them to let their constituents know about the program; and
- Articles about the program in local newspapers (see St. Cloud Times article in Appendix).

Once news about the program began to spread, word-of-mouth advertising was effective in both student-to-student and company-to-company conversations as well.

THE RESULTS | SciTechsperience exceeds expectations

The initial grant from MnSTA included funding for 40 matching stipends statewide, with 10 of those reserved for internships in Greater Minnesota companies. Due to the accelerated implementation schedule of the program and the positive response from both students and companies at the outset, MnSTA increased matching stipend funding to 60 internships. By mid-May, all 60 interns were placed.

MHTA recruited a pool of 246 students from a broad range of communities and college/university systems across the state (see Tables 1 and 2). Although the minimum GPA to be eligible for the program was 2.5, SciTechsperience attracted very accomplished students: The average applicant’s GPA was 3.3, and the average GPA of the students hired was 3.4.

Table 1. Students Applicants by Geographic Location (based on their permanent address)

Geographic Location of Students	# Student Applicants	# Students Hired
Minneapolis and St. Paul	51	16
Suburbs	134	30
Greater Minnesota	45	15
Out of State (attend school in MN)	16	6
Total	246	67

Table 2. Student Applicants by College/University System

Student Applicants by College/University System	# Student Applicants	# Students Hired
University of Minnesota	79	29
MN State Colleges & Universities	72	14
Private Colleges	67	13
Out of State Colleges (resident of MN)	26	10
For-profit Colleges	2	1
Total	246	67

Sixty companies applied to the program, creating 131 internship openings (see Table 3). A broad range of industries were represented in the company applicants, with Biotechnology and IT companies having the highest number of applicants, internship openings and number of interns hired (Table 4).

Table 3. Business Applicants by Geographic Location

Geographic Location of Companies	# Companies Applicants	# Positions Posted	# Students Hired
Minneapolis/St. Paul	16	42	28
Suburbs	34	65	25
Greater Minnesota	10	24	14
Total	60	131	67

Table 4. Business Applicants by Industry Type

Industry	# Companies	# Openings	# Interns Hired
Biotechnology and Life Sciences	22	54	32
IT/Computer Technology	21	38	15
Mining, Materials, Manufacturing and Processing	9	26	12
Fuels, Energy and Energy Management	4	7	5
Aerospace and Defense	2	4	1
Agriculture, Food and Forestry	2	2	2
Total	60	131	67

By mid-May, MHTA placed 60 students with matching stipends in 40 different companies. MHTA facilitated the hiring of 7 additional students with companies that did not receive a matching stipend for a total of 67 students placed. These results represent a 67% increase over the original goal of forty internships. Fourteen interns were matched with Greater Minnesota companies in Duluth, Alexandria, Pine River, Isanti, St. Cloud and Northfield.

FEEDBACK | Companies and Students found SciTechsperience mutually beneficial

Students and companies were given an opportunity to share their experience with the SciTechsperience program via a survey, and respondents expressed how beneficial the program was for them. Below are some excerpts from the survey:

Students said:

“I was fortunate enough to receive diverse experiences in analytical chemistry not only in the laboratory, but the workplace in general. Having never worked at a corporation before, I was introduced to its fast-paced and demanding environment. Furthermore, I became proficient with the instruments and software tools associated with analytical chemistry. Having a slew of available positions at my fingertips was more beneficial than I can explain. **Thank you for connecting me with my future.**”

–Kevin Clark, Andover, Gustavus Adolphus College

“I was able to work one-on-one with professional scientists, many times being left on my own to complete the work. The jobs and experiments I performed were perfectly fit to my field of study, and I was able to apply my education to actual problems and applications. The SciTechsperience Internship Program was excellent in helping me find and connect with available internship positions. The list of available internship opportunities enabled me to tailor my search to my specific needs and desires, which led to me finding the perfect internship position.” – Jay Tavakolian, Maple Grove, University of Minnesota

“The greatest benefit about the internship was gaining skills and exposure to a variety of analytical techniques, methods and instruments. Learning what the day-to-day responsibilities are working for a research and analytical lab, especially one that is ISO 17025 certified. After only a few weeks, I began to really look forward to going to work the next morning to see what transpired with an experiment started the previous day. It’s been so nice to work with people that are incredibly smart as well as open to helping with a problem or being incredibly patient as I learned a new technique or instrument. Most importantly, with this experience **I now feel totally confident I am on the right career path** and am really excited about continuing my studies. After graduation I look forward to starting my science career with a similar company in Minnesota.” – *Carla Pulles, Minneapolis, Minneapolis Community and Technical College*

Companies said:

“Many politicians and programs claim to want to help small business and technology grow but very few actually do; SciTechsperience is one that actually does.” — *Manager at GeaCom, Inc., Duluth*

“We found the SciTechsperience program very beneficial. There were a large number of applicants from which to choose with a variety of skills, so we were able to select those with skills that matched our needs. The interns gained scientific application of their academic learning. **This kind of a program is very beneficial to the work force and educational enterprise in Minnesota.**”

— *Marie McNeff, Ever Cat Fuels, Isanti*

“Our interns worked out extremely well. They were valuable members of our help desk team this summer. We would definitely consider hiring them as full time employees in the future. The program was well run and very beneficial to us.” — *Marty Kieffer, Virteva, Minneapolis*

“We are a startup company that had just established a new Application Development Lab in Minneapolis. The students that came through your program were great candidates and the two interns we chose performed well. They definitely helped meet our needs as a growing organization. I also believe that they got a very well-rounded experience. We would definitely consider participating in the program again.” — *Mark Wuollet, Selkea Systems, LLC, Minneapolis*

The program survey was conducted in mid-August. Fifty-two percent of the students responding to the survey reported that their SciTechsperience summer internship led directly to extended employment in either a part-time or fulltime capacity beyond the original term of the internship. Three students received offers of full-time employment, with one additional student starting a fulltime job at Boston Scientific. These figures are a good indication of the success of the program given that 15% of the original terms of the internships were still underway at the time of the survey and a majority of the interns (63%) are still in the process of completing their degrees.

Based on our survey, the top two reasons given for hiring an intern through the program were (1) receiving a matching stipend (70%) and (2) to have help with a short term project (40%). In other words, many of these small companies were not necessarily in a position to bring on additional fulltime staff, which is why the internship option was appealing to many of them in the first place. Another key component in why the SciTechsperience program was so attractive to companies was the recruiting and screening service provided by MHTA. This leg work was an enormous help to small companies because they don’t have the resources to handle the recruiting and screening of applicants that larger companies do.

THE IMMEDIATE CHALLENGE | Continued funding for the program

Despite the tremendous success of the SciTechsperience pilot, the future of the program is uncertain. The Minnesota Science and Technology Authority did not receive ongoing funding during the 2012 legislative session to ensure the SciTechsperience program is able to continue or grow.

MnSTA has committed its remaining 2011 appropriation (\$30,000) to the SciTechsperience program for 2013. In addition, MHTA has secured some private sector and foundation funding which will maintain the program on a smaller scale. MHTA remains committed to growing the program to build Minnesota's STEM workforce pipeline and support small tech companies. However, after dozens of private foundation applications and corporate asks, it is clear that the SciTechsperience program will only be sustained through ongoing state funding.

If Minnesota is going to keep pace with other states such as Ohio and Nebraska in making investments in its STEM workforce, the state must make continued competitive investments in the state's future STEM human resources that are so critical to helping Minnesota develop a robust and stable economy.

CONCLUSION | SciTechsperience is an effective program that deserves support

The SciTechsperience program was developed to train, attract and retain STEM talent in Minnesota. As the large number of STEM workers needed in Minnesota in the near future continues to loom over the high tech sector, this mission is no less critical today than when it began.

SciTechsperience is a successful and effective program with great potential to help fill Minnesota's growing STEM workforce needs. The 67 interns placed during the 2012 pilot are only the tip of the STEM talent iceberg. Almost half of the positions posted by company applicants were left open because the matching stipend funding was limited to 60 internships, and the small companies that are eligible for the program need the matching stipend incentive to bring on an intern. According to DEED, there are approximately 6,000 science and technology companies in Minnesota with fewer than 100 employees, meaning that the SciTechsperience pilot merely scratched the surface of potential hiring companies in 2012.

The SciTechsperience program has proven that it is an effective tool in helping to build Minnesota's STEM workforce. With a solid foundation and a clear path forward, the only remaining need for the program is stable funding support to continue the mission of training, attracting and retaining the state's STEM talent. The actions of the 2013 legislature will largely determine whether this successful program will continue to be a resource to help strengthen Minnesota's economy through the state's science and technology industries.

SciTechsperience Student Tally by College/University Attended

Name of College/University/ Technical School	School City	Metro or Greater MN	School State	School System	Total Applicants	Hired
Bemidji State University	Bemidji	Greater MN	MN	MnSCU	2	1
Minnesota State Community and	Moorhead	Greater MN	MN	MnSCU	1	0
Minnesota State University Moorhead	Moorhead	Greater MN	MN	MnSCU	1	0
Minnesota State University-Mankato	Mankato	Greater MN	MN	MnSCU	18	2
Ridgewater College	Hutchinson	Greater MN	MN	MnSCU	3	0
Saint Cloud State University	St. Cloud	Greater MN	MN	MnSCU	9	3
Southwest Minnesota State University	Marshall	Greater MN	MN	MnSCU	2	1
St Cloud Technical and Community	St. Cloud	Greater MN	MN	MnSCU	1	0
Winona State University	Winona	Greater MN	MN	MnSCU	4	1
Bethany Lutheran College	Mankato	Greater MN	MN	Private	1	1
Carleton College	Northfield	Greater MN	MN	Private	2	0
College of Saint Benedict	St. Joseph	Greater MN	MN	Private	1	0
Gustavus Adolphus College	St. Peter	Greater MN	MN	Private	6	3
Saint Johns University	Collegeville	Greater MN	MN	Private	1	1
St Olaf College	Northfield	Greater MN	MN	Private	8	1
University of Minnesota-Duluth	Duluth	Greater MN	MN	U of M	7	4
University of Minnesota-Morris	Morris	Greater MN	MN	U of M	1	0
DeVry University-Minnesota	Edina	Metro	MN	For-profit	2	1
Anoka-Ramsey Community College	Coon Rapids	Metro	MN	MnSCU	4	0
Century Community and Technical	White Bear Lake	Metro	MN	MnSCU	6	0
Dakota County Technical College	Rosemount	Metro	MN	MnSCU	2	1
Inver Hills Community College	Inver Grove Heights	Metro	MN	MnSCU	1	1
Metropolitan State University	Minneapolis	Metro	MN	MnSCU	2	1
Minneapolis Community and Technical	Minneapolis	Metro	MN	MnSCU	11	1
Normandale Community College	Bloomington	Metro	MN	MnSCU	5	2
Bethel University	Arden Hills	Metro	MN	Private	2	0
Hamline University	St. Paul	Metro	MN	Private	3	0
St Catherine University	St. Paul	Metro	MN	Private	1	1
University of St Thomas	St. Paul	Metro	MN	Private	42	6
University of Minnesota-Twin Cities	Minneapolis	Metro	MN	U of M	71	25
Occidental College	Los Angeles	Out of State	CA	Other	1	0
Iowa Lakes Community College	Estherville	Out of State	IA	Other	1	0
Iowa State University	Ames	Out of State	IA	Other	1	0
Purdue University	West Lafayette	Out of State	IN	Other	1	0
University of Notre Dame	Notre Dame	Out of State	IN	Other	1	1
Massachusetts Institute of Technology	Cambridge	Out of State	MA	Other	1	0
Michigan Technological University	Houghton	Out of State	MI	Other	3	2
University of Missouri	Columbia	Out of State	MO	Other	1	0
Washington University, St. Louis	St. Louis	Out of State	MO	Other	1	0
North Dakota State University	Fargo	Out of State	ND	Other	1	0
University of North Dakota	Grand Forks	Out of State	ND	Other	3	1
Dartmouth College	Hanover	Out of State	NH	Other	1	0
Hamilton College	Clinton	Out of State	NY	Other	1	1
Syracuse University	Syracuse	Out of State	NY	Other	1	0
Miami University of Ohio	Oxford	Out of State	OH	Other	1	1
South Dakota School of Mines and	Rapid City	Out of State	SD	Other	2	0
Vanderbilt University	Nashville	Out of State	TN	Other	1	1
University of Wisconsin - Eau Claire	Eau Claire	Out of State	WI	Other	2	1
University of Wisconsin - Madison	Madison	Out of State	WI	Other	1	1
University of Wisconsin - Stout	Menomonie	Out of State	WI	Other	1	1
Total					246	67

SciTechsperience Student Tally by College/University Attended

Summary:

Total number of student applicants: 246

Schools by Geographic Location:

50 different colleges and universities are represented in the applicant pool

30 schools are in Minnesota

17 in Greater MN, 13 in metro, 20 out of state

20 schools outside of MN including Notre Dame, MIT, Dartmouth, Occidental and Syracuse

>>> means we're luring MN kids back to the MN workforce even though they've gone away to college

Top 3 schools in terms of applicants:

U of M Twin Cities (71), St. Thomas (42), MN State Mankato (18)

Out of state: 3 each from Michigan Technical University and University of North Dakota

Top 3 schools in terms of students hired:

U of M Twin Cities (25), St. Thomas (6) and U of M Duluth (4)

Students by Location of School	# student applicants	# student hired
Students from Greater MN schools	68	18
Students from metro schools	152	39
Students from out of state schools	26	10
Total	246	67

College/University System	# student applicants	# student hired
U of M	79	29
MnSCU	72	14
Private Colleges	67	13
Out of State	26	10
For-profit	2	1
Total	246	67

SciTechsperience Student Information by Major, Year in School and GPA

Name of Major or Certificate Program	Applied	Hired
Aerospace Engineering	4	2
Automation and Robotic Systems Technology	1	0
Biochemistry	8	2
Bioengineering	1	1
Biology	11	2
Biology, Chemistry, Biotechnology	1	1
Biomedical Engineering	22	8
Biomedical Science	1	0
Biomedical Technology	2	0
Bioproducts Engineering	4	2
Biotechnology	3	0
Business Management	1	0
Cell and Molecular Biology	1	1
Chemical Engineering	7	3
Chemistry	19	8
Clinical Research	1	0
Computer Engineering	5	1
Computer Programming	4	0
Computer Science	16	3
Culinology	2	1
Electrical & Computer Engineering	2	2
Electrical Engineering	26	5
Exercise Science	1	0
General Engineering	5	1
Geology	1	1
Industrial Design	1	0
Industrial Engineering	3	1
Information Technology	5	2
Manufacturing Engineering and Technology	1	0
Materials Science and Engineering	5	3
Mathematics	10	4
Mechanical Engineering	52	9
Microbiology	1	0
Nanoscience Technology	2	1
Network Security	2	2
Neuroscience	5	0
Physics	5	0
Physiology	2	1
Security Technologies	1	0
Statistics	1	0
Wind Energy	1	0
Total	246	67

Year in School	Applied	Hired
College Junior	127	31
College Senior	78	25
Graduate Student - Doctoral Candidate	1	1
Graduate Student - Masters	18	6
Technical College Student, Year 2	22	4
Total	246	67
Avg GPA of enrollees	3.3	
Avg GPA of hired students	3.4	

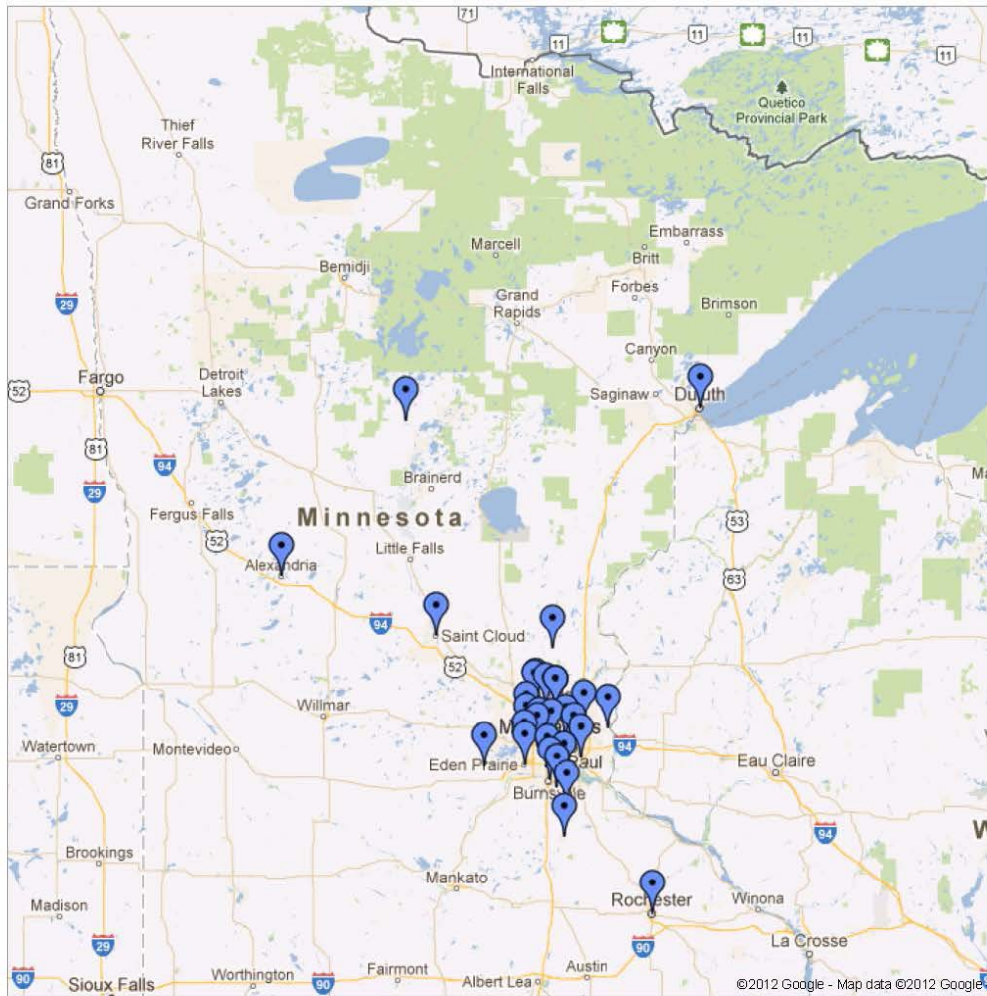
SciTechsperience Student Tally Based on Permanent Residence

Permanent Address of Students (City, State)	Home State	Location	# Applicants	# Hired
Brownton	MN	Greater MN	1	0
Cambridge	MN	Greater MN	1	0
Canby	MN	Greater MN	1	1
Clear Lake	MN	Greater MN	1	1
Dassel	MN	Greater MN	1	1
Delano	MN	Greater MN	2	1
Duluth	MN	Greater MN	2	2
Hackensack	MN	Greater MN	1	0
Hibbing	MN	Greater MN	1	0
Holdingford	MN	Greater MN	1	0
International Falls	MN	Greater MN	1	1
Jacobson	MN	Greater MN	1	0
Mankato	MN	Greater MN	8	0
MAZEPPA	MN	Greater MN	1	0
Moorhead	MN	Greater MN	1	0
New Ulm	MN	Greater MN	1	0
North Mankato	MN	Greater MN	1	0
Owatonna	MN	Greater MN	1	1
Red Wing	MN	Greater MN	1	0
Rochester	MN	Greater MN	3	1
Saint Cloud	MN	Greater MN	8	2
Sartell	MN	Greater MN	1	1
Sauk Centre	MN	Greater MN	1	0
Verndale	MN	Greater MN	1	1
Wadena	MN	Greater MN	1	1
Wells	MN	Greater MN	1	1
Winona	MN	Greater MN	1	0
Minneapolis	MN	Metro	32	13
Saint Paul	MN	Metro	19	3
Andover	MN	Metro	4	2
Anoka	MN	Metro	5	1
Apple Valley	MN	Metro	1	0
Arden Hills	MN	Metro	1	0
Belle Plaine	MN	Metro	1	1
Blaine	MN	Metro	3	2
Bloomington	MN	Metro	6	2
Brooklyn Park	MN	Metro	6	1
Burnsville	MN	Metro	2	0
Champlin	MN	Metro	2	1
Chanhausen	MN	Metro	1	0
Circle Pines	MN	Metro	2	0
Coon Rapids	MN	Metro	2	0
crystal	MN	Metro	1	0
Eagan	MN	Metro	9	1
Eden Prairie	MN	Metro	6	1
Edina	MN	Metro	5	1
Elk River	MN	Metro	1	1
Excelsior	MN	Metro	2	0
Falcon Heights	MN	Metro	2	0
Farmington	MN	Metro	1	0
Grant	MN	Metro	1	0
Ham Lake	MN	Metro	1	0

SciTechsperience Student Tally Based on Permanent Residence

Hastings	MN	Metro	2	0
Hugo	MN	Metro	1	1
Inver Grove Heights	MN	Metro	1	0
Lakeville	MN	Metro	2	1
Lino Lakes	MN	Metro	2	0
Mahtomedi	MN	Metro	2	1
Maple Grove	MN	Metro	4	2
Maplewood	MN	Metro	3	0
Mendota Heights	MN	Metro	3	0
Minnetonka	MN	Metro	1	0
mounds view	MN	Metro	1	0
New Hope	MN	Metro	1	0
North Oaks	MN	Metro	2	1
Oakdale	MN	Metro	5	1
Plymouth	MN	Metro	5	1
prior lake	MN	Metro	1	0
Robbinsdale	MN	Metro	1	0
Rosemount	MN	Metro	1	1
Roseville	MN	Metro	2	0
Saint Paul Park	MN	Metro	1	1
Savage	MN	Metro	2	1
Shakopee	MN	Metro	3	0
Shoreview	MN	Metro	1	1
Shorewood	MN	Metro	1	0
South Saint Paul	MN	Metro	1	0
Spring Lake Park	MN	Metro	1	0
St Louis Park	MN	Metro	2	0
St. Anthony	MN	Metro	2	0
Stillwater	MN	Metro	3	0
Vadnias Heights	MN	Metro	1	0
Waconia	MN	Metro	1	0
Watertown	MN	Metro	1	0
West Lakeland	MN	Metro	1	0
Woodbury	MN	Metro	5	3
Saint Michael	MN	Metro	2	0
Wayzata	MN	Metro	1	1
Milford	IA	Out of State	1	1
Lindstrom	MI	Out of State	1	0
Grand Forks	ND	Out of State	1	0
Omaha	NE	Out of State	1	0
Avondale	PA	Out of State	1	0
Aberdeen	SD	Out of State	1	1
Cedar Park	TX	Out of State	1	0
South Jordan	UT	Out of State	1	0
Appleton	WI	Out of State	1	0
Augusta	WI	Out of State	1	0
Green Bay	WI	Out of State	1	1
Kenosha	WI	Out of State	1	1
Milton	WI	Out of State	1	1
Onalaska	WI	Out of State	1	1
Port Washington	WI	Out of State	1	0
Rothschild	WI	Out of State	1	0
			246	67

Map showing the location of the 2012 SciTechsperience Companies



2012 locations of SciTechsperience companies

SciTechsperience Business Summary 2012

Industry	Number of companies per industry	Openings	Hired
Aerospace and Defense	2	4	1
Agriculture, Food and Forestry	2	2	2
Biotechnology and Life Sciences	22	54	32
Fuels, Energy, Energy Management	4	7	5
IT/Computer Technology	21	38	15
Mining, Materials, Manufacturing and Processing	9	26	12
Total	60	131	67

County where companies are located	Number of companies per county	Openings	Hired
Anoka	5	10	1
Carver	1	2	1
Cass	1	2	2
Dakota	4	4	2
Douglas	1	2	1
Hennepin	27	59	26
Isanti	1	3	3
Olmsted	1	2	0
Ramsey	10	24	21
Rice	2	6	1
Scott	1	5	1
St. Louis	2	7	5
Stearns	2	2	2
Washington	2	3	1
Total	60	131	67

City where companies are located	Number of companies per city	Openings	Hired
Alexandria	1	2	1
Anoka	1	1	0
Apple Valley	1	1	1
Blaine	3	4	1
Bloomington	1	1	1
Burnsville	1	1	0
Champlin	1	1	1
Coon Rapids	1	4	0
Duluth	2	7	5
Eagan	1	1	0
Eden Prairie	2	2	2
Farmington	1	1	1
Golden Valley	3	7	1
Isanti	1	3	3
Maple Grove	3	9	4
Minneapolis	9	22	11
Minnetonka	1	3	0
Northfield	2	6	1
Nowthen	1	2	0
Pine River	1	2	2
Plymouth	4	8	3
Rochester	1	2	0
Roseville	1	1	1
Saint Cloud	2	2	2
Saint Paul	7	20	17
Shakopee	1	5	1
South St. Paul	1	1	1
St. Louis Park	3	6	3
Stillwater	1	1	1
Waconia	1	2	1
White Bear Lake	1	3	2
Total	60	131	67

SciTechsperience Business Summary 2012

Geographic Location of Companies	Number of Companies	Openings	Hired
Greater Minnesota	10	24	14
Minneapolis/St. Paul	16	42	28
Suburban Metro	34	65	25
Total	60	131	67

Total Number of Unique Jobs Posted	74
Total Number of Openings Created	131
Number of Interns Hired to Date	67

Type of Internship	Number of Openings	Hired
Full-time	65	53
Full-time or Part-time internship	34	4
Part-time	32	10

Company Ownership	Number of Companies
Veteran-owned	5
Woman-owned	6
Woman- and Minority-owned	2
Minority-owned	1
None of the above	46

SciTechsperience Job Descriptions for Positions Filled

Laboratory Intern	This role is responsible for assisting with sample preparation, evaluation, performance testing and the reporting of test results in the Laboratory to support R&D (Product Improvement, Next Generation Products and New Application Products) in the area of fire suppression. Sample preparation and evaluation may range from bench scale to pilot scale mixing, and may include preparation of full scale burns. Intern will build on critical thinking skills such as thinking on their feet, developing standard test protocols and presenting results. Intern will gain experience in laboratory, field test and manufacturing settings.
Engineering Co-op	The company's mission is the development and commercialization of innovative medical devices for use in minimally invasive interventional and surgical procedures. Interrad is looking for a co-op student to start in Spring of '12 to assist with all aspects of the company. Because of the company's size, each employee wears many hats. In particular, the co-op student will assist with:>>product design>>product testing>>test fixture design & construction>>documentation>>vendor relationships>>mfg. quality control>>etc
Optical-Electronics Engineer Intern	Summary: Initially - Work with company engineers to conduct hands-on testing and assembly of gas laser components and related electronics for current laser detector design. Includes recommending improvements to test procedures and assembly procedures, working with detector vendors, and assessing and resolving technical concerns. Also involves assembly of small mechanical parts and alignment of optical components. Candidate needs to be self-motivated and ask questions when appropriate. Essential Duties and Responsibilities:>>Assemble components and learn to perform basic troubleshooting on optical, mechanical and electrical systems,>>Read mechanical and electrical prints, learn to understand tolerances and interferences,>>Ability to use hand tools and basic power tools to perform assembly operations,>>Use metrology equipment; voltage and current meters, micrometers and other gauges,>>Must be able to follow manufacturing instructions and maintain required documentation,>>Communicate problems and/or improvements to systems and work with company engineers and technical staff to make corrections,>>Ability to work with other co-workers in this area (technicians and assemblers) as the need arises,>>Adapt to changing priorities as business conditions dictate,>>Other tasks as related to the success of the business. and
Research Assistant	The intern will work with scientists working in the field of energy. Various tasks may include but not be limited to working with scientists designing equipment, helping in presentations on how to plant, produce and harvest energy crops, production of biodiesel using the Mcgyan Process.
Assistant Scientist, Biocatalyst Development	We are looking for a dynamic and highly motivated candidate with an advanced degree in Material Science, Polymer Science, Chemical Engineering, or a related field. Responsibilities: - Perform laboratory tests and/or experiments, which may include various assays and basic molecular biology techniques (gene cloning, PCR, plasmid purification and transformation, etc.) following established procedures and protocols; - Sample cultures and prepare samples for further analysis; - Operate additional instruments including UV-vis, centrifuge, pH meter, analytical balance, incubator and laminar flow hood; - Prepare culture media, agar plates and other stock solutions; - Clean and autoclave process equipment and other instruments; - Perform necessary laboratory maintenance and housekeeping; - Comply with biohazards/chemical safety standards.
Analyst	Conduct scientific literature assessments in the field of Medical Technology. Review, and classify literature by level of evidence. Summarize findings in word document with reference libraries.
Systems Support Analyst	The Service Desk Analyst is responsible for providing support to Virteva's Managed Services customers. S/he will perform various activities related to managing general Desktop and Server information technology, as well as application software testing. This includes, but is not limited to: Email (Exchange, others), Directory Services (AD), Windows XP and Windows7, Windows Server, Linux, Cisco network equipment, application of patches, incident management, recovery, change control, and performance monitoring and reporting.
Engineering Intern	The engineering intern will assist in the process of design, fabrication, and installation of Aerospace Fabrication & Materials' (AFM) products. The intern will work directly with AFM's engineers and production personnel. Position receives a majority of their direction from the Engineering Manager but will receive day-to-day direction from an Engineer. The purpose of the internship is to provide an engineering student with hands-on experience in the aerospace industry. This experience will be based around AFM's efforts to provide passive thermal control products for satellites, spacecraft, and cryogenic applications. The intern will work in direct support of our engineering team. AFM manufactures custom products; therefore, specific learning experiences will be dictated by current project requirements.
Mechanical Engineering Intern	We want someone interested in a rewarding internship experience in mechanical engineering. The intern will be involved in concept development and testing of respiration calorimeters. Projects may include modification to a small sealed chamber for subject comfort and access and design and build and testing of an access port to sealed chamber that minimizes air exchange. You will be expected to maintain a lab notebook with detailed description of work. You should show a strong mechanical aptitude, be able to work independently and possess good organizational and communication skills. The most successful past interns applied their own initiative in finding ways to make real contributions and learning about the science involved in the fields the company supports.
Computer Programmer	Work with a team of professionals in the design and development of small- to enterprise-level software solutions using a wide variety of technologies Create and maintain models and frameworks that facilitate development Participate in the development of rapid prototypes to facilitate product development efforts Assist in problem solving activities associated with hardware and software Explore new technologies that may impact the way work is done at Seward and/or the products created Provide analysis of projects to determine projected work effort
Software Developer	Comparatio, a highly competitive and innovative new software development company, has immediate internships available with significant growth opportunities for a few enthusiastic, self-motivated individuals. As an intern at Comparatio, you will: - Earn an attractive monthly salary - Enjoy flexible office hours (minimum two days per week) - Have the option of permanent employment after 6 to 9 months - Assist in the development of cutting-edge Business Management Software, Project Management Software, and Data Warehouse Applications - Hone your development skills within a fresh new framework to rapidly create and modify business applications - Participate on projects that can be viewed in a scientific context and used as a basis for term papers or thesis documents - Gather practical experience with business processes and their implementation in software - Establish beneficial, long-term business relationships
Software and Algorithm Developer Intern	We want one or two individuals interested in a rewarding internship experience in software development. Interns will be involved in developing code, preparing user documentation and testing. The most successful past interns applied their own initiative in finding ways to make real contributions and learning about the science involved in the fields the company supports.
Biomedical summer intern	The intern will develop laboratory data management methodologies, procedures, and schedules. This includes sourcing required data collection hardware and software. Areas of responsibility will include, but are not limited to the following: traceability, bar coding, equipment calibration/certification, inventory management, material storage management, and Design of Experiment data collection and evaluation.

Engineering Internship	Engineering Internship Laser Peripherals, LLC, is an industry-leading manufacturer of flexible surgical laser fiber used in a variety of general surgical therapies. Laser Peripherals is seeking an Intern for to assist in our engineering department. The Intern will have the following primary responsibilities: - Work with engineering and quality staff to assist in various design, test, inspection, and or quality assignments. - May assist with staff on various production issues. - May assist with engineering, quality and purchasing staff on various component and / or supplier issues. - Other duties as assigned within the Engineering or Quality departments. At the completion of this assignment, the candidate will gain experience in the following areas: - Exposure to regulated (FDA / ISO) medical device manufacturing environment. - Exposure to FDA / ISO quality management system and related documentation systems. - Medical device design considerations inside a regulated (FDA / ISO) environment. - Exposure to testing requirements within a regulated medical device environment.
Summer Intern	Assist engineers in electrical and mechanical characterization testing of probe cards and accessories. Work with our Manufacturing Engineers to develop multimedia (video, still pictures and text) work instructions to be used by our assembly department. This will entail working with design engineering and production to ensure the design intent is achieved at the lowest cost after considering safety and ergonomics. May occasionally assist with basic production assembly and testing.
Research Intern	The Research Intern will provide support for research activities and project teams at Syntiron, an early stage biotechnology company that is developing human vaccines. This position will work under the direction of the supervisor and/or project team leader with responsibilities to include prioritizing daily tasks, assisting colleagues with tasks, and recording experimental results using proper documentation methods. This will include experimental, developmental, and routine laboratory analysis of soluble vaccine preparations using testing methods that include SDS PAGE, 2D profiles, DNA gels, carbohydrate profiles in gel by periodate oxidation, lipid analysis by TLC, affinity chromatography, and ELISA screening assays.
Culinology Interns	The student is working on:>>Create R&D methods & Test the recipe and/or formula>>Gold Standard formulation (From ideation to creation)>>Match Gold Standard formulation Healthy snacks spices (Within +/- tolerance) for plant scale-up>>Nutritional analysis & food labeling>>SKU Commercialization>>Pilot Plant Test Run with R&D
Biotech Intern	Assist PhD Project Leader in synthetic, analytical and biochemical lab work aimed at biomimetic coating of medical devices. Assist PhD Project Leader in biochemical and cell biology lab work aimed at gene transfer in neuronal cells. Assist Director Commercial Operations in Production and Quality Control of proprietary coating compositions for medical and other devices.
Engineer/Designer intern	We seek to mentor and train leaders in the Design and Engineering fields and are presently in the process of designing a business/strategy model to form a low cost/high value Entrepreneurial Incubator Wing of KabloomA. Design that would work to evaluate, strategize for, design and engineer working prototypes that are ready to be used to raise funds or go directly into production. We are constantly bombarded with MedTech and other projects by early stage entrepreneurs. Beyond this responsibilities will involve working to design and build products either for existing clients or new clients in the MedTech or commercial product space.
Summer Intern, Optics	This position involves the practical application of optics principles and experimental practice to solve the following problems: 1. Identify the design space of a proprietary reflector system for increasing total illumination onto a solar panel. This may include ray-tracing studies using a designated tool like Zemax or Code V. 2. Validate the identified design space by designing and performing the relevant experiments. This will likely include both laboratory-type, small-scale experiments as well as practical trials in an experimental solar array. 3. Identify the source of contribution to the overall reflectivity of the reflector system. This will involve optical analysis of the various components of the reflector such that their integrated system performance is understood from first principles. This will include some model development and verification as part of problem #2. 4. Identify potential solutions to metrology problems involving AR coating degradation, measurement of optical clarity, and other similar problems as may arise.
Summer Intern Mechanical Engineering	Summer intern in mechanical engineering. The major focus of this position will be mechanical design and testing of optical instruments. Specific duties include designing lens barrels, designing a scatterometer and testing the scatterometer and other optical instruments.
Analytical Technician	1. Complete tasks as assigned. 2. Follow standard protocol and standard analysis procedures. 3. Run HPLC instrumentation. 4. Follow sample preparation protocol. 5. Data analysis and write reports.
Programmer	A programmer will create, review, and modify computer software. Producing computer software involves coding, testing, debugging, documenting, archiving, and building programs. A programmer's primary responsibility is translating software requirements into code.
Lab Operations Intern	Responsibilities: Assist operations team with commissioning and operating pilot process for wastewater treatment. Help prepare batches of raw water and treatment/cleaning chemical solutions. Assist with cleaning out equipment between batches and test runs. Collect, label, and ship process samples. Assist with basic in-house lab analysis of samples. Monitor and log operational data (both manually and electronically). Assist with pilot equipment maintenance and modifications/reconfigurations.
Project Assistant-Awear Neurocognitive Feedback	Intern will work with Engineers and Scientists at Koronis Biomedical Technologies (KBT) and the University of Minnesota Institute of Child Development and Department of Biomedical Engineering to develop a neurosensing and biofeedback device to improve attention and executive function in students. Intern will carry out defined testing and measurement activities for development of a prototype device under supervision of Project Leader at KBT. Interactions with UM lab personnel will also be expected. KBT is the R&D entity that is working with Awear Technologies/New Productivity Group on a SBIR Phase I project to develop a prototype for a proof of concept test and feasibility trials.
Clinical Associate	The intern will be required to assist in data management for a multi-center clinical trial. Data management includes broad knowledge of a variety data processing and cloud-based computation. No experience required. This is a terrific way to see how medical devices are tested for efficacy.
LENR Intern	Hunt Utilities Group, LLC is researching the LENR phenomenon in which Hydrogen ions interact with Nickel or Paladium to create heat. The successful applicant will spend the first six weeks of the project studying the history, researchers, theories, and experimental set-ups employed, including those at our campus. The information gathered will be presented weekly as the interns develop time lines, geographical maps and technology maps to convey the information to the rest of the team. In the 6th week, the interns will be given the opportunity to propose an experiment that they would like to try in the field and then work with shop and lab staff to fabricate, instrument, and execute the experiment. A write up of the experiment, positive results or not, will be expected by the end of the 10th week. NOTE-START DATE AND WORK SCHEDULE ARE FLEXIBLE
Summer Intern, Software Engineering	Summer intern in software engineering. The major focus of this position will be creation of an open-source Kanban plugin for Bugzilla, writing software to control an optical instrument and, time permitting, creation of a parser for a domain specific language and/or adapting a spreadsheet class from a book into a desktop application. The successful applicant will practice Lean/Agile development, Test Driven Design and Pair Programming.
Assistant Scientist, Analytical Chemistry	Assist scientists in the analyses of various organic acids and fermentation feedstock materials as well as final product assessment. This person will also be responsible for an independent project on HPLC development that will be determined by the Analytical Director. Duties: - HPLC analyses - including HPLC software integration - Melting point determinations - Working with Laboratory Information Management System (LIMS) - pH determinations - Moisture analyses using Karl Fischer - Color determinations using Hunter Colorimeter

Technology Research Assistant	Assist Pre Sales Engineering staff in developing technical business solutions for "ruggedized" smart consumer phones, PDAs and tablets. Research, evaluate and test hardware solutions, operating system interfaces, device management software, warehouse management software apps and integration services.
Research Intern	>>Support multi-disciplinary research and development projects. Job tasks may include device assembly, lab testing, electronics, and/or software projects.
Manufacturing Engineer Intern	Work with the President and Manufacturing Engineer to monitor and measure manufacturing processes to identify ways to reduce losses, decrease time requirements, and improve quality. Perform an energy audit and implement approved changes. Assist management team with implementation of ISO 9001. Participate in safety programs.
Wellhead Protection Intern	The job would involve assisting in the development of wellhead protection plans (WHPP) for municipal public water suppliers and then assisting those water suppliers in the implementation of the tasks identified in those Plans. More information can be found on wellhead protection requirements and the plan development process on the Minnesota Department of Health website.
Intern Analytical Chemist	Background/Purpose: This is a temporary position. The individual performs routine sample preparations and prescriptive analyses following the direction of Analysts and/or Project Managers. Individuals in this position will communicate primarily internally but may send requested reports and results of data testing directly to customers at the customer request and with prior internal approval. The position reports to the V.P. Laboratory Services. Primary Responsibilities/Accountabilities:>>Maintain laboratory work areas in an orderly fashion>>Train on one major platform under the guidance of an analyst>>Perform routine testing as requested>>Prepare samples for testing following written or verbal instructions>>Provide results of testing using report templates such as Excel files, Word Documents, etc.>>Fax or Email results of testing to customers after internal review and approval>>Follow all ISO 17025 procedures and quality systems>>Follow all Safety Procedures
Intern Engineering R&D	This is a temporary position. The individual supports efforts in the R&D group as directed by senior researchers or project managers. R&D efforts may include materials compounding or materials syntheses. Individuals in this position will communicate primarily internally but may send requested reports and results of data testing directly to customers at the customer request and with prior internal approval. The position reports to the V.P. R&D Services. Primary Responsibilities/Accountabilities:>>Maintain laboratory work areas in an orderly fashion>>Perform routine testing as requested>>Prepare samples for testing following written or verbal instructions>>Provide results of testing using report templates such as Excel files, Word Documents, etc.>>Fax or Email results of testing to customers after internal review and approval>>Follow all ISO 17025 and 9001 procedures and quality systems>>Follow all Safety Procedures
Engineering Intern	Engineering Intern for the summer of 2012. The Intern will be assigned to an active Design project, Lean project or factory support assignment. The intern will be able to apply many of the skills learned during their course work and see how an industry leader does business. Essential Job Functions - Assist with manufacturing support. - Take part in Lean deployment. - Lead / Participate in Corrective Actions Process and provide root cause analysis / corrective actions. - Take part in new product deployment. - Contribute to a variety of capital improvement projects. - Bill of Material accuracy. - Product design projects. - Print verification for new models.
Electrical/Mechanical Detailer	A Detailer is responsible for creating detail drawings for all the fabricated parts within a machine assembly through the use of the CAD system. Specific projects include: 185 drawings to change powder coat finish callout (SolidWorks skillset) Washer change (cord grip seal); approx. 15-30 drawings; both elect/mech (Solidworks) Wago terminals part change (AutoCAD skillset) Convert parts to Library parts (naming conventions); 1000 parts involved (2-3 years) Border updates for outsourced parts (ASME standard format); many parts involved. Conversion of CADRA electric drawings to new software format (TBD)
Engineering Intern	Support multi-disciplinary research and development projects. Job tasks may include device assembly, lab testing, electronics, and/or software projects.
Computer Science Electrical Engineering Internships	The project entails matching software drivers to hardware requirements, Developing user interfaces, Establishing HIPPA compliant data pathways. It's important to have a good command of engineering because we are working with a high level of electronic sophistication with highly regulated software that requires good project oversight. The interns we select will work directly with external hardware and software vendors as well as internal staff.
Software Development Intern	Clientek does custom software development and IT process improvement projects for our clients. We are looking for an intern who can help us in a variety of rolls, including software development, quality assurance and business analysis. We are looking for someone who enjoys a fast paced, challenging environment where you have the opportunity to learn and use new, exciting technologies and will contribute to the success of our clients and company on a daily basis.
Engineer Summer Internship	Dreve is looking for a student to analyze, document and improve our manufacturing processes in Eden Prairie, Minnesota. Under direction of the Operations Manager and Engineering Department, the Intern will have the opportunity to apply classroom education in real life situations. This is a great opportunity for a either an engineer or B.S. degree to gain hands on experience in a broad range of challenging activities including the following: *Time Studies *Value stream mapping *Assist teams to identify opportunities for process improvement and waste elimination *Other job tasks as assigned
Research Intern	>>Support multi-disciplinary research and development projects. Job tasks may include device assembly, lab testing, electronics, and/or software projects.
Technology Development Program Management Intern	Major Duties>>Assist Product Development Director(s) with project management including working with software programmers, producers, graphic artists and healthcare subject matter experts.>>Monitor development progress verses established timeline and project objectives.>>Assist set-up of technical service operations under the supervision of senior professionals.>>Help serve as on-site liaison/coordinator with field technology and tech services personal.>>Facilitate communication within the team and prepare oral/written reports for team members and management.>>Perform and update competitive analysis and new trend analysis that impact the project in specific and the business in general.>>Contribute insights on usability and effectiveness of software products with target customers including doctors, nurses, healthcare administrators, and other allied health professionals. Major Learning Opportunities>>How life sciences, scientific, math, computer programming, and liberal arts knowledge is applied in the real world entrepreneurial environment within a viable commercial business serving the critical healthcare segment of our economy.>>Under the direct supervision and mentorship of seasoned and dynamic business managers and executives, develop analysis, observation, goal setting, strategy, teamwork, and emotional intelligence skills that have been proven to lead to career success.>>Explore career opportunities in the promising medical technology sector and make valuable networking connections for future job possibilities.>>Get experience, build confidence, and marketability>>Test your skills, challenge your intellect, and get performance feedback.>>Learn from and get positive exposure to top-notch world-class leaders and innovators
Engineering Intern	Support creation of web site articles. Support multidiscipline research and development projects. Tasks may include mechanical and electrical hands on assembly, lab testing, calibration and similar software related tasks. Prerequisite to be enrolled or graduated from BS program in mechanical, aerospace or biomedical engineering.

SciTechsperience 2012 Business Survey Summary

The purpose of the Business survey was to gauge the companies' satisfaction with the SciTechsperience program and their experiences with the interns.

The SciTechsperience Business Survey was published on August 16, 2012 to 72 contacts at 47 companies. This included all companies that hired an intern through SciTechsperience, two that hired interns on their own, and the companies that still had positions open at the time the survey was published. Forty-seven responses were received, but the exact number of companies represented in the responses is unknown. At least 30 different companies participated.

Summary

The companies participating in SciTechsperience generally had a good experience with their students and a positive experience with the program.

With regards to the students themselves, the employers gave a 'definitely yes' response to measures such as:

- the student had the necessary skills to perform his/her internship duties (81%); and
- the student supported the company through his/her fresh perspectives and specialized skill set (70%).

Respondents strongly believed that having an intern allowed them to recruit and screen a potential future employee (79%), and that having an intern allowed them to meet an immediate business need in an affordable way (84%).

In general, most companies felt the quantity and quality of the student applicant pool was adequate, with 63% responded 'definitely yes' to this question. This satisfaction rating would likely have been higher if it had been possible to do targeted recruiting of students based on the position openings, but the pilot did not work that way. Instead, students and companies applied concurrently.

Questions 15 – 19 asked respondents to force rank five program benefits from most important to least important. The results, in order of most to least important, were as follows:

- 1) Receiving a matching grant to help pay the intern's wages;
- 2) Having an affordable way to address a short-term staffing/project need;
- 3) Having a qualified pool of applicants to choose from and 3) having the ability to evaluate a potential employee; and
- 5) Not having to spend time doing their own recruiting.

One of the main goals of the Minnesota Science and Technology Authority for the SciTechsperience Internship Program was job creation. Since close to half of the students were still in school, it wasn't clear what the results of this measure would be. At the time of the survey, more than half of the companies reported that they had extended the duration of employment through either a permanent fulltime position (7%) or through extending the internship (47%). These results are very encouraging and a good indication of successful matches.

The responses with regards to how companies felt about interacting with program staff and tools were also positive. Program tools such as the online application and PDF document with student profiles were ranked either good (51% for both tools) or excellent (40% and 26% respectively). The reimbursement process was ranked good or excellent by those who had experience with it.

Communication with program staff was a highlight in the results, with the quality of communication receiving high marks from a majority of respondents (excellent - 53%, good - 40%). The best measure of program satisfaction was Question 26, which asked "If the SciTechsperience Internship Program is offered next year, will you apply again?" Eighty-nine percent of respondents indicated they were certain to apply, and 11% percent responded maybe or probably.

Because future funding for the SciTechsperience program is unclear, respondents were asked a series of questions that explored potential funding models and asked to select the response that best matches their position on the statements. Not surprisingly, the companies were most interested in participating in the program if they were able to receive a matching stipend to help fund the internship (38% strongly agree, 34% agree). Many companies were still interested in participating without a matching stipend (43% agree, 11% strongly agree), which is an indication that they find value in the recruiting service provided. However, when asked if they would participate in the program if a fee was introduced to have access to the pool of applicants or if a hiring fee was added, the respondents showed clear disfavor with this approach. Forty-seven percent disagreed with an access fee and 38% disagreed with a hiring fee.

Full survey results are available from MHTA upon request.

SciTechsperience 2012 Student Survey Results

The purpose of the SciTechsperience Student Survey was to gauge the students' satisfaction with the SciTechsperience program and their internship experiences. The survey was published on August 16, 2012 to the 65 students hired as SciTechsperience interns as of August 1, 2012. The total number of respondents was 58, which is an 89% response rate.

Summary

Overall, the responses of the students indicate that they had a positive experience with both their work at the companies and with the SciTechsperience program.

In terms of their experience on the job, most students gave their employers high marks – responding 'definitely yes' for providing:

- A suitable mentor (86%),
- Adequate training (74%),
- Challenging opportunities (76%),
- A safe environment (93%), and
- Treating them with respect (93%).

Eighty-three percent felt they definitely had the ability to develop professional workplace skills and received experience in their field of study. The results were also positive, although not quite as strong, with regards to the ability to:

- Network and make professional connections (69% definitely yes),
- Gain experience that compliments their coursework (64% definitely yes), and
- Gain exposure to other parts of the company, such as marketing and operations (59% definitely yes).

Seventy eight percent believe their internship experience will give them an edge over their peers in the job market.

The internships also had a positive impact on students' education goals, with 79% reporting that they were definitely on the right path with their current plans. Three students are opting to change to a different major in a STEM field while another is moving from a medicine track to a STEM track as a result of their experience. Not one student decided to move to a non-STEM major. Students also felt they definitely had a better idea of what they could do professionally with a STEM degree as a result of their experience (79%).

When students were asked what the most beneficial aspects of their internships were, gaining confidence in their abilities through hands-on experience was the most common theme in the responses. They appreciated being able to apply what they've learned in the classroom as well as having the ability to learn new tools and processes. Several students commented on how much they enjoyed a caring and capable mentor, feeling challenged, having client contact, and getting exposure to the professional work environment. They also valued being part of a team.

One of the main goals of the Minnesota Science and Technology Authority for the SciTechsperience Internship Program was job creation. Since close to half of the students are still in school, it wasn't clear what the results of this measure would be. At the time of the survey, half of the students reported extended employment with the company where the internship took place through either a permanent

fulltime position (3%) or through having the internship extended (47%). One other student received a fulltime position with Boston Scientific.

With regards to how the students' felt about interacting with the SciTechsperience program, we found that on the whole, their experience was positive here also. Several suggestions about the tools of the program were made including concerns about the functionality of the online job board. Some students would like to see more job opportunities from which to choose. But the comment that came up most often was actually a call to do more to promote SciTechsperience, which is a good indication that they found value in the program and want others to know about it, too.

Full survey results are available from MHTA upon request.

Program helps place interns with tech companies

Garrett Brennan grew up watching his father, a software engineer for Wolters Kluwer, work magic on a computer.

So perhaps it's not surprising that by the time Garrett was a student at Sartell Middle School, he was creating his own websites.

He came up with "Garrett's Intelligence Machine," a computerized version of Magic 8-Ball, into which you could ask any question and get some sort of appropriate answer. He also fashioned a "Jeopardy!" program based on the game show.

"Some of my earliest memories are sitting in my father's lap, watching him do what he did on computers," said Brennan, a 20-year-old entering his junior year at St. Cloud State University. "Doing those sorts of things has always been a hobby."

It's a hobby that Brennan, after a false start in a different pursuit, is likely to make his profession. After spending two years on track toward a chemical engineering major at the University of Minnesota, Brennan decided computer science was what he really wanted to study. Thanks to a new internship program administered by the Minnesota High Tech Association, he's already gaining workplace experience with riteSOFT, a St. Cloud software company.

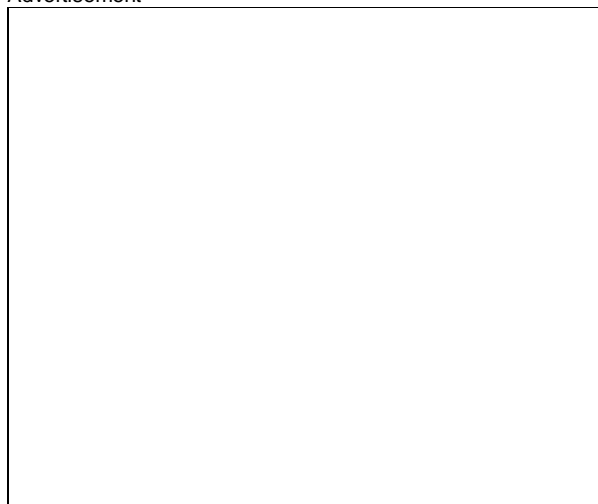
Brennan is one of 65 Minnesota college students in science, technology, engineering and math disciplines who have been placed in Minnesota's first SciTechsperience internship program. It is designed to provide hands-on experience at businesses with fewer than 100 employees and keep talented students in Minnesota after they graduate.

Businesses receive a state-funded match to cover half of the intern's wages — up to \$2,500 for 400 hours — and every last cent of the first \$150,000 appropriation has been spent.

And it looks like each of three interests might come out a winner. Students get experience that can act as a springboard into their first job. Small businesses get assistance and access to bright, young individuals they might not otherwise attract. And Minnesota is taking steps to keep up with other states in the STEM arms race.

The intern

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Brennan has traded his \$900-a-month rent near the U of M's Minneapolis campus for a return home. He likes the idea of saving some money and getting his meals for free. But most important is that he's energized by what he's learning.

"A friend of mine was in the computer science major at St. Cloud State, and I'd decided chemical engineering wasn't what I wanted to do," said Brennan, a 2010 Sartell High School graduate. "... I want to enjoy what I do. My dad ... preached to me to keep your hobbies separate, but my goal is to have fun with my job and I think this is the way to do that."

Unlike some internships, where making coffee and filing papers might be the order of the day, Brennan was immediately enlisted to help with the programming of riteSOFT's latest release of riteSCAN, a mobile warehouse solution for tracking inventory. At his desk, he works with a device that will be the implement for reading bar codes on items. A couple of computer screens reflect his interaction with the device.

"My fingerprints are going to be all over what the customer is getting," Brennan said of the riteSCAN upgrade – which is expected to go live within a few days. "It's cool knowing that what I'm working on is going to be in their hands. I know people who are interns at 3M or places like that and they're basically doing menial tasks."

Brennan is the only one of the 65 interns working in Central Minnesota. However, two other students with ties to the area also

have been placed.

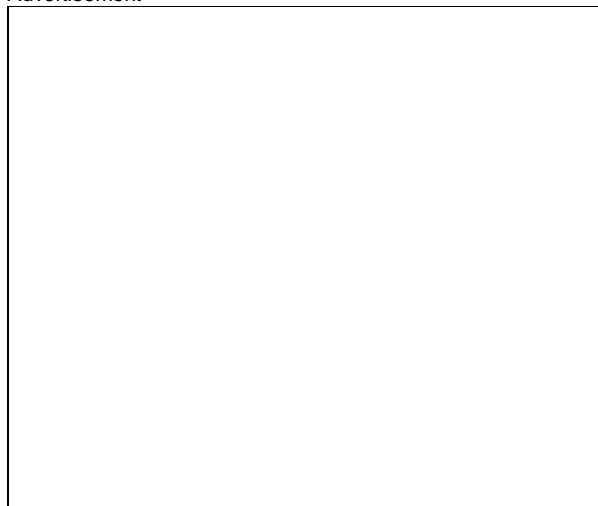
Jonathon Ray, a St. Cloud State graduate student in information assurance, was hired as a programmer by Seward Inc. in Minneapolis. The company provides custom e-learning and digital marketing products to help clients improve training, marketing and operations.

And Ben Eidenschink, a St. John's University senior majoring in chemistry, was hired as a research intern by Syntiron, a St. Paul company that is developing vaccines and therapeutics to fight bacterial diseases.

Seven other St. Cloud State students and one from the College of St. Benedict applied for the SciTechsperience program but were not placed. There were 242 applications from Minnesota.

What makes Brennan's achievement all the more special is that he has yet to take many computer science classes. Much of what he's doing for riteSOFT, he's learned

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on his own.

“It’s a great opportunity because technology moves so fast,” he said. “Businesses like this are on the vanguard of that. That’s why I think it’s so valuable what you learn here because you might not get it in the classroom. I’d like to stay in the workforce if I can. It’s a good way to expose yourself to what’s happening.”

The business

Bruce Hagberg doesn’t want to think about where he’d be without Brennan. Hagberg, riteSOFT’s CEO, has 80 customers spread across five countries, which much more growth in the offing.

A map outside his office has pins stuck wherever there’s a client or a carrier of his company’s software. While a cluster of the pins are stuck in Minnesota, including for example a local client in Goldleaf Plastics, others dot the U.S., Canada, South Africa, Australia and the United Kingdom. About 40 percent of the business is international.

To accommodate all those clients, he has 10 employees.

“We’re a small company with big plans,” said Hagberg, who started his career in 1982 with Bankers Systems, forerunner of Wolters Kluwer. Six years ago, he bought RT Enterprises and, about a year ago, moved it from Waite Park to a suite of offices at 220 Park Ave. S in St. Cloud. On Jan. 1, it became riteSOFT.

RiteSOFT produces two primary products:

riteTIME, a touchscreen labor data collection system, and riteSCAN Mobile Warehouse for SYSPRO, which is designed to work with the widely used business planning and management software.

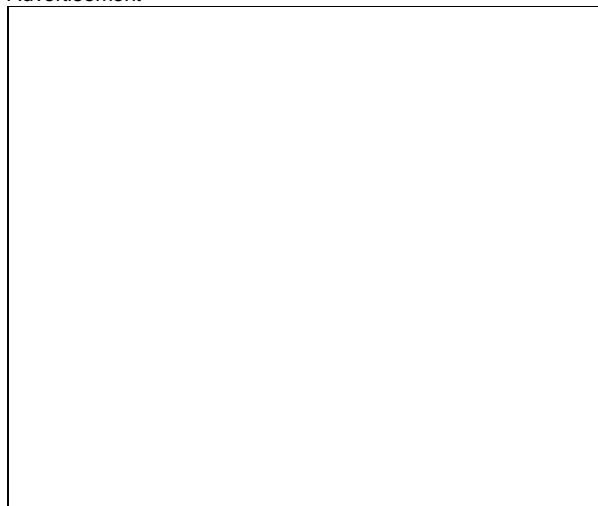
A typical riteSOFT system can cost \$20,000, though that’s a fraction of what custom designers charge.

RiteSCAN is about to go into its 27th version, under the direction of developer Chris Sieben. Hagberg knew he needed to increase his staffing, but there was doubt as to how fast he could hire the right full-time employee.

“Chris is really sharp, but he needed more help,” Hagberg said. “Every day, every person counts when you’re trying to roll out the enhancement requests we have. Without Garrett, this release would’ve at least been delayed.”

Sieben said he gave Brennan a good 20 minutes to get acclimated, showed him his

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desk and the breakroom. Then it was into testing and coding.

“We needed someone to produce for us and, happily, that’s what happened,” said Sieben, a St. Cloud State graduate who is in his sixth year with the company after working for Bankers Systems. “Garrett has also helped with information technology needs around the office. He’s got some very rich experience in what he’s doing. It’s not going to replace his education ... But it’s really going to supplement what he gets in school.”

Hagberg already has more in mind for Brennan, if it works out. Hagberg said an internship like the SciTechsperience program allows a company like riteSOFT to identify a prospect who could be five to 10 times more productive than the average person.

“He’s a keeper, absolutely,” Hagberg said. “He’s sharper than the average bear and has a good personality. Developers don’t always have good communication and people skills.”

The program

A group of St. Cloud-area legislators toured riteSOFT recently, learning about the business from Hagberg. But it was Brennan they really came to see. Representatives Steve Gottwalt and King Banaian and Senators John Pederson and Michelle Fischbach checked in to see how the state’s investment, part of a one-time \$500,000 appropriation to the Minnesota Science and Technology Authority, was paying off.

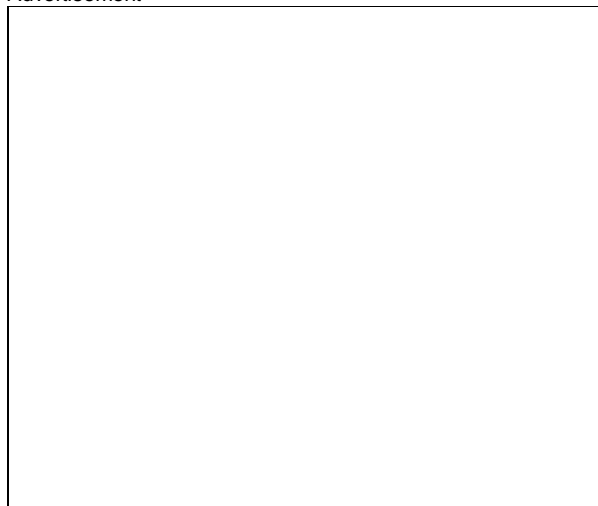
They were pleased.

“We don’t have enough international business in this community and this also creates jobs for someone like Garrett,” said Banaian, an economics professor at St. Cloud State. “Technical jobs like this represent about 1½ percent of the employment in the area and that’s a figure we need to grow if we’re going to prosper.”

Representatives from the MHTA hope other legislators will feel the same way. Earlier this year, legislation to fund the SciTechsperience program for 2013 was not approved. The MHTA is looking to privately fund the internships next year.

It’s an uphill battle. Ohio has a STEM internship program that placed 692 interns at 167 companies this year, receiving \$2.6 million in state funding. Nebraska has a program funded at \$1.5 million annually. According to the MHTA, Minnesota will need 188,000 additional STEM professionals by 2018, not including health care workers.

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The average high-tech salary in Minnesota is \$79,200 – 74 percent higher than the average private sector wage.

“Our goal is to make Minnesota more prosperous,” said Joanna Dornfield, public policy manager for the MHTA. “RiteSOFT is a prime example of what we want to promote and, in an ideal world, our interns will get jobs at the places they’re working.”



Purchase Image Zoom
Intern Garrett Brennan concentrates on a programming task at riteSOFT offices Thursday. Brennan is part of a new internship program administered by the Minnesota High Tech Association. / Dave Schwarz, dschwarz@stcloudtimes.com

How do you get kids interested in STEM? Target parents

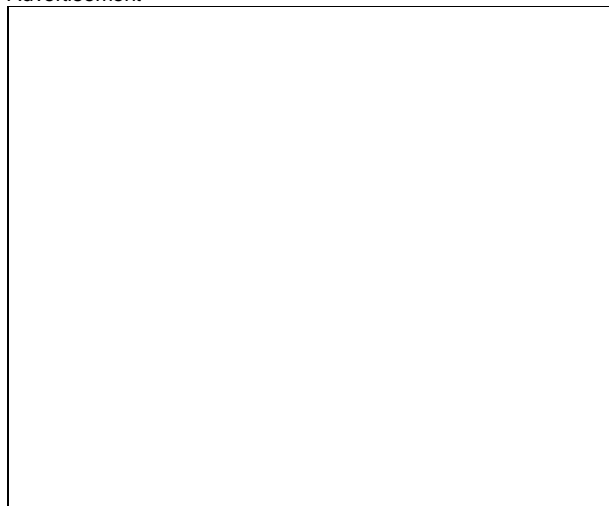
A new study in Psychological Science, a journal of the Association for Psychological Science, explores the role parents can play in promoting students' STEM motivation. Many students choose not to take advanced science and math courses in high school and that has dimmed the outlook for America's competitiveness in the global economy.

Researchers studied 181 students and their parents in Wisconsin. In October of the 10th grade, researchers mailed parents a brochure that highlighted the importance of math and science in various careers. In January of the 11th grade, parents received another mailing with information about a website that featured links to STEM resources. In the spring of 11th grade, parents were asked to evaluate the website.

A control group received none of the materials.

In the summer after 12th grade, all families completed a questionnaire and information about the STEM classes the students took was recorded. Students whose parents received the materials took roughly an extra semester of advanced math or science. Mothers who received the materials viewed math and science courses as more useful than those in the control group, and parents who received the materials had more conversations with their children about the importance of STEM education.

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Minnesota High Tech Association
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Type	Date	Num	Name	Memo	Split	Amount
5900 - STEM Education Expense						
5956 - SciTechsperience Grant - Co						
Check	06/05/2012	12539	Innovative Surface Technologies, Inc.	SciTechSperience Progam Intern Reimbursement fr 1050 - Wells Fargo		702.00
Check	06/05/2012	12540	Seward Inc.	SciTechSperience Intern Program - Reimbursable a 1050 - Wells Fargo		300.00
Check	06/05/2012	12541	Ativa Medical	SciTechSperience Program - Reimbursable amount 1050 - Wells Fargo		320.00
Check	06/05/2012	12541	Ativa Medical	SciTechSperience Program - Reimbursable amount 1050 - Wells Fargo		514.50
Bill	07/06/2012	SciTech	riteSOFT, LLC	SciTechSperience Reim end date: 5/19/12	2000 - Accounts Payable	200.00
Bill	07/06/2012	SciTech	riteSOFT, LLC	SciTechSperience Reim end date: 6/16/12	2000 - Accounts Payable	821.88
Bill	07/06/2012	SciTech	Atmosphere Recovery Inc.	SciTechSperience Reim - Aaron Kern	2000 - Accounts Payable	731.50
Bill	07/06/2012	SciTech	Ativa Medical Corporation	Reim for Katherine Silkowski	2000 - Accounts Payable	260.00
Bill	07/06/2012	SciTech	Ativa Medical Corporation	Reim for Ka Man Lee	2000 - Accounts Payable	1,240.00
Bill	07/06/2012	SciTech	Ativa Medical Corporation	Reim for John McGuire	2000 - Accounts Payable	640.00
Bill	07/06/2012	SciTech	Ativa Medical Corporation	Reim for Christopher Bahr	2000 - Accounts Payable	1,078.00
Bill	07/06/2012	SciTech	Ativa Medical Corporation	Reim for Kelsey Whalen	2000 - Accounts Payable	859.32
Bill	07/16/2012	Scitech reim	Atomosphere Recovery	SciTech Intern Aaron Kern	2000 - Accounts Payable	1,113.00
Bill	07/16/2012	SciTech Reim	Source Water Solutions, LLC	SciTech Intern Greg Valitchka	2000 - Accounts Payable	1,302.00
Bill	07/16/2012	SciTech Reim	GeaCom Inc.	SciTech intern Yang Zhou	2000 - Accounts Payable	523.08
Bill	07/16/2012	SciTech Reim	GeaCom Inc.	SciTech intern Yang Zhou	2000 - Accounts Payable	1,307.69
Bill	07/16/2012	SciTech Intern	GeaCom Inc.	SciTech intern Waqas Khalid	2000 - Accounts Payable	492.31
Bill	07/16/2012	SciTech Intern	GeaCom Inc.	SciTech intern Waqas Khalid	2000 - Accounts Payable	1,230.77
Bill	07/16/2012	SciTech Reim	Seward Inc.	SciTech Intern Jonathan Ray	2000 - Accounts Payable	1,145.02
Bill	07/16/2012	SciTech Intern	Innovative Surface Technologies, Inc..v	SciTech intern Austin Wetmore	2000 - Accounts Payable	1,040.00
Bill	07/16/2012	SciTech Intern	Innovative Surface Technologies, Inc..v	SciTech intern Jaylon Tavakolian	2000 - Accounts Payable	1,092.00
Bill	07/16/2012	SciTech Reim	Source Water Solutions, LLC	SciSciTech Intern Madeline Umsheid	2000 - Accounts Payable	802.12
Bill	07/27/2012	SciTechSperience	Virteva	SciTechSperience Monique Moison	2000 - Accounts Payable	1,749.37
Bill	07/27/2012	SciTechSperience	Virteva	SciTechSperience Scott Green	2000 - Accounts Payable	1,751.70
Bill	07/27/2012	SciTechSperience	Eckhardt Optics LLC	SciTechSperience - Evan Oman	2000 - Accounts Payable	1,740.00
Bill	07/27/2012	SciTechSperience	Eckhardt Optics LLC	SciTechSperience - Jay Hankerson	2000 - Accounts Payable	1,740.00
Bill	07/27/2012	SciTechSperience	Aspen Research Corporation	SciTechsperience - Dhruv Khullar	2000 - Accounts Payable	940.62
Bill	07/27/2012	SciTechsperience	Aspen Research Corporation	SciTechsperience - Dhruv Khullar	2000 - Accounts Payable	331.25
Bill	07/27/2012	SciTechsperience	Aspen Research Corporation	SciTechsperience - Carla Pulles	2000 - Accounts Payable	1,000.00
Bill	07/27/2012	SciTechsperience	Aspen Research Corporation	SciTechsperience - Carla Pulles	2000 - Accounts Payable	400.00
Bill	07/27/2012	SciTechsperience	Aspen Research Corporation	SciTechsperience - Kevin Clark	2000 - Accounts Payable	1,170.00
Bill	07/30/2012	SciTech Intern	Awear Technologies	SciTechsperience Inter Sam Schmitz	2000 - Accounts Payable	467.50
Bill	07/30/2012	SciTech Intern	Good for you Ingredients, LLC	SciTechsperience Intern - Ross Kuchta	2000 - Accounts Payable	0.00
Bill	08/08/2012	SciTech	Good for you Ingredients, LLC	SciTechsperience Intern - Ross Kuchta	2000 - Accounts Payable	750.00
Bill	08/08/2012	SciTech	Eckhardt Optics LLC	SciTechSperience - Jay Hankerson	2000 - Accounts Payable	760.00

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Type	Date	Num	Name	Memo	Split	Amount
Bill	08/08/2012	SciTech	Eckhardt Optics LLC	SciTechSperience - Evan Oman	2000 · Accounts Payable	760.00
Bill	08/08/2012	SciTech	MEI Research, Ltd.	SciTechsperience intern - Daisha Jensen	2000 · Accounts Payable	2,500.00
Bill	08/08/2012	SciTech	MEI Research, Ltd.	SciTechsperience intern - Yue Wan	2000 · Accounts Payable	2,500.00
Bill	08/08/2012	SciTech	Good for you Ingredients, LLC	SciTechsperience Intern - Ross Kuchta	2000 · Accounts Payable	1,000.00
Bill	08/08/2012	SciTech Intern	Ativa Medical Corporation	SciTech intern John McGuire	2000 · Accounts Payable	1,216.00
Bill	08/08/2012	SciTech	Ativa Medical Corporation	SciTechSperiece Intern Katherine Silkowski	2000 · Accounts Payable	989.10
Bill	08/08/2012	SciTech	Ativa Medical Corporation	SciTechSperiece Intern Ka Man Lee	2000 · Accounts Payable	940.00
Bill	08/08/2012	SciTech	Ativa Medical Corporation	SciTechSperiece Intern Kelsey Whalen	2000 · Accounts Payable	642.25
Bill	08/08/2012	SciTech	Ativa Medical Corporation	SciTechSperiece Intern Christopher Bahr	2000 · Accounts Payable	1,087.31
Bill	08/16/2012	SciTechsperience	Virteva	SciTech Inter - Scott Green	2000 · Accounts Payable	748.30
Bill	08/16/2012	SciTech	Virteva	SciTech Inter - Monique Moison	2000 · Accounts Payable	750.63
Bill	08/16/2012	SciTech	Clientek, Inc.	SciTech intern - Cardell Boganey	2000 · Accounts Payable	2,280.00
Bill	08/16/2012	SciTech Intern	Atmosphere Recovery Inc.	SciTechSperience Reim - Aaron Kern	2000 · Accounts Payable	655.50
Bill	08/16/2012	SciTech Intern	Ever Cat Fuels, LLC	SciTech Intern Cody Anderson	2000 · Accounts Payable	2,500.00
Bill	08/16/2012	SciTech Intern	Innovative Surface Technologies, Inc..v	SciTech intern Austin Wetmore	2000 · Accounts Payable	1,144.00
Bill	08/16/2012	SciTech	Innovative Surface Technologies, Inc..v	SciTech intern Jason Tavakolian	2000 · Accounts Payable	706.00
Bill	08/16/2012	SciTech	GeaCom Inc.	SciTech intern Waqas Khalid	2000 · Accounts Payable	776.92
Bill	08/16/2012	SciTech	GeaCom Inc.	SciTech intern Yang Zhou	2000 · Accounts Payable	669.23
Bill	08/16/2012	SciTech Intern	Awear Technologies	SciTechsperience Intern Sam Schmitz	2000 · Accounts Payable	691.25
Bill	08/23/2012	scitechspereience	tenKsolar, Inc.	SciTechsperience Intern Hongjian Fan	2000 · Accounts Payable	2,500.00
Bill	08/23/2012	scitechspereience	Laser Peripherals, LLC	SciTechsperience intern Thomas Metzler	2000 · Accounts Payable	2,500.00
Bill	08/23/2012	scitechspereience	Aerospace Fabrication & Materials, LLC (A	SciTechsperience Intern Patrick Price	2000 · Accounts Payable	2,500.00
Bill	08/23/2012	scitechspereience	Source Water Solutions, LLC	SciSciTech Intern Madeline Umsheid	2000 · Accounts Payable	1,115.00
Bill	08/23/2012	scitechspereience	Source Water Solutions, LLC	SciTech Intern Greg Valitchka	2000 · Accounts Payable	310.00
Bill	08/24/2012	scitechspereience	Seward Inc.	SciTech Intern Jonathan Ray	2000 · Accounts Payable	1,054.98
Bill	08/30/2012	Scitechspereience	Nanocopoeia, Inc.	Scitech intern Tho Hieu	2000 · Accounts Payable	743.75
Bill	08/30/2012	SciTechsperience	Life Science Innovations	SciTech Intern Erica Tipcke	2000 · Accounts Payable	2,500.00
Bill	08/30/2012	SciTechsperience	Life Science Innovations	SciTech Intern Najwa Duncan	2000 · Accounts Payable	2,500.00
Bill	08/30/2012	SciTechsperience	Life Science Innovations	SciTech Intern Erich Berg	2000 · Accounts Payable	2,500.00
Bill	08/30/2012	SciTechsperience	Life Science Innovations	SciTech Intern Elizabeth Smith	2000 · Accounts Payable	2,500.00
Bill	08/30/2012	SciTechsperience	Life Science Innovations	SciTech Intern Benjamin Eidenschink	2000 · Accounts Payable	2,500.00
Bill	08/30/2012	SciTechsperience	Sartec Corporation	SciTechsperience Intern Tom Flake	2000 · Accounts Payable	1,945.32
Bill	08/30/2012	SciTechsperience	Sartec Corporation	SciTechsperience Intern Scott Klasen	2000 · Accounts Payable	2,500.00
Bill	08/30/2012	SciTechsperience	Innovative Surface Technologies, Inc..v	SciTech intern Austin Wetmore	2000 · Accounts Payable	316.00
Bill	09/07/2012	SciTechSperience	GPM Inc.	SciTechsperience Intern Samuel Hodel	2000 · Accounts Payable	2,500.00
Bill	09/07/2012	SciTechsperience	GPM Inc.	SciTechsperience Intern Andrew Straus	2000 · Accounts Payable	2,500.00
Bill	09/07/2012	SciTechsperience	Hunt Utilities Group, LLC	SciTechsperience intern Malachi Heder	2000 · Accounts Payable	2,500.00
Bill	09/07/2012	SciTechsperience	Hunt Utilities Group, LLC	SciTechsperience intern Wesley Baish	2000 · Accounts Payable	2,500.00
Bill	09/12/2012	SciTechsperience	BioAmber Inc.	Intern Paige Kuplic	2000 · Accounts Payable	2,500.00

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Type	Date	Num	Name	Memo	Split	Amount
Bill	09/12/2012	SciTechsperience	BioAmber Inc.	Intern Lacey Stiller	2000 · Accounts Payable	2,500.00
Bill	09/13/2012	SciTechsperience	Kablooe Design	SciTEch intern Mitchell Nelson	2000 · Accounts Payable	710.00
Bill	09/14/2012	SciTechsperience	Celadon Systems, Inc.	SciTech intern Andrew Haefner	2000 · Accounts Payable	2,500.00
Bill	09/14/2012	SciTech Intern	Awear Technologies	SciTechsperience Inter Sam Schmitz	2000 · Accounts Payable	435.00
Bill	09/14/2012	SciTEch intern	Source Water Solutions, LLC	SciTech Intern Greg Valitchka	2000 · Accounts Payable	833.12
Bill	09/14/2012	SciTech intern	Source Water Solutions, LLC	SciTech Intern Madeline Umsheid	2000 · Accounts Payable	558.00
Bill	09/14/2012	SciTech intern	Ativa Medical Corporation	SciTechSperiece Intern Kelsey Whalen	2000 · Accounts Payable	483.93
Bill	09/14/2012	SciTech Intern	Ativa Medical Corporation	SciTechSciTechSperiece Intern John McGuire	2000 · Accounts Payable	644.00
Bill	09/14/2012	SciTEch intern	Ativa Medical Corporation	SciTechSciTecSciTechSperiece Intern Christopher	2000 · Accounts Payable	334.69
Bill	09/14/2012	SciTEch intern	Ativa Medical Corporation	Reim SciTechSperiece Intern Katie Silikowski	2000 · Accounts Payable	1,250.96
Bill	09/19/2012	SciTechsperience	United Science	SciTechsperience Intern Jia Hwei Cheong	2000 · Accounts Payable	2,500.00
Bill	09/19/2012	SciTEch intern	United Science	SciTechsperience Intern Jon Thompson	2000 · Accounts Payable	2,500.00
Bill	09/19/2012	SciTEch	MikrobEX Inc.	SciTech intern Dan Muckala	2000 · Accounts Payable	2,500.00
Bill	09/19/2012	SciTechsperience	United Science	SciTechsperience Intern Benjamin Alfveby	2000 · Accounts Payable	2,500.00
Bill	09/19/2012	SciTEch	Selkea Systems, LLC	SciTech reim Zachary Johnson	2000 · Accounts Payable	2,500.00
Bill	09/19/2012	SciTech Intern	Selkea Systems, LLC	SciTech reim Mark Wuollet	2000 · Accounts Payable	2,500.00
Bill	09/19/2012	SciTEch	EarthClean Corporation	SciTech Intern Gregory Nigon	2000 · Accounts Payable	2,495.00
Bill	09/19/2012	SciTEch	Aspen Research Corporation	SciTechsperience - Dhruv Khullar	2000 · Accounts Payable	1,228.13
Bill	09/19/2012	SciTechsperience	Aspen Research Corporation	SciTechsperience - Carla Pulles	2000 · Accounts Payable	1,100.00
Bill	09/19/2012	SciTechsperience	Aspen Research Corporation	SciTechsperience - Kevin Clark	2000 · Accounts Payable	1,330.00
Bill	09/26/2012	ScitechSperience	riteSOFT, LLC	SciTechSperience Reim end date: 5/19/12	2000 · Accounts Payable	946.87
Bill	09/26/2012	ScitechSperience	riteSOFT, LLC	SciTechSperience Reim end date: 6/16/12	2000 · Accounts Payable	531.25
Bill	09/26/2012	SciTEchsperience	AUM Cardiovascular, Inc.	SciTech intern Nick Paulson	2000 · Accounts Payable	2,500.00
Bill	09/26/2012	SciTechsperience	Douglas Scientific	SciTech intern Jamal Kotifani	2000 · Accounts Payable	2,500.00
Bill	09/26/2012	SciTech intern	Comparatio USA, LLC	SciTech intern Alexander Kuhnke	2000 · Accounts Payable	2,500.00
Bill	10/15/2012	SciTEch	Interrad Medical Inc.	Intern: Alexander Hambrock	2000 · Accounts Payable	2,500.00
Bill	10/18/2012	SciTEch	Manus Products, Inc.	SciTechsperience intern: Mladin Gajic	2000 · Accounts Payable	2,500.00
Bill	10/30/2012	SciTEch	Good for you Ingredients, LLC	SciTechsperience Intern - Ross Kuchta	2000 · Accounts Payable	750.00
Bill	10/30/2012	SciTEch	Kablooe Design	SciTEch intern Brendan Hoskens	2000 · Accounts Payable	1,790.00
Bill	10/30/2012	SciTEch	Supply Chain SErVICES LLC	SciTech Intern - Chantharang Phouapradit	2000 · Accounts Payable	2,500.00
Bill	11/08/2012	SciTechsperience	Institute for Technology Transfer LLC	SciTech intern Julianne Eggum	2000 · Accounts Payable	2,255.00
Total 5956 · SciTechsperience Grant - Co						<u>146,233.12</u>
Total 5900 · STEM Education Expense						<u>146,233.12</u>
TOTAL						<u><u>146,233.12</u></u>