Access Computing

OPPORTUNITIES! NEWS

...for Computing and IT Students with Disabilities

Fall 2014

Dear Student,

This newsletter comes from *AccessComputing*. Funded by the National Science Foundation, *AccessComputing* serves to increase the participation of people with disabilities in computing fields. We apply evidence-based practices to help students with disabilities successfully pursue undergraduate and graduate degrees and careers in computing.

Pages two and three of this letter share *AccessComputing* team member profiles, information on how to join *AccessComputing*, and how to attend conferences as a student.

Pages four and five showcase multiple internships and scholarship opportunities.

Pages six and seven highlight multiple computing educational, career, and scholarship tools, as well as how to get involved in undergraduate research.

We sincerely wish you a successful and enjoyable college experience. To request this newsletter in an alternate format, *AccessComputing* at 206-685-3648 (V/TTY) or *accesscomp@uw.edu*.





Richard Ladner Principal Investigator, *AccessComputing* Professor, Computer Science and Engineering University of Washington



Sheryl Burgstahler Co-PI, *AccessComputing* Director, DO-IT University of Washington



Brianna Blaser Coordinator/Counselor, AccessComputing University of Washington

AccessComputing Team Member Profile: Jackson



For me, having a strong community of supports was the difference between graduating from college and dropping out. When I first got to college, it was scary to be away from home for the first time in this sea of strange faces. Possibly due

to my disability, it was hard to make friends and set up the sort of community of supports that I think most people develop naturally. My academic performance suffered as a result and, after a disappointing freshman year, I took a semester leave of absence to collect myself. When I came back, I quickly and deliberately setup a strong community of supports both in and outside of school.

I found out that my college actually offered several supports to its students for no additional charge. I scheduled regular meetings with my academic advisor and enrolled in peer tutoring to help me improve my academic performance. I also reached out to Disability Resources, and they helped advocate for me with my professors and ensured that I received the proper accommodations.

I also reached out to several disability support groups, including *AccessComputing*, to connect with other people in my peer group. I found that people who had my same disability immediately understood what I was going through and expressed sympathy and support, without me having to explain my first year or apologize for my disability. Because of this, I made some of my strongest friendships during college through these groups. These groups also connected me with many career opportunities and internships.

My strongest supporters are my parents. During college, I called or Skyped with them on a daily basis. We'd go through my day together to make sure I wasn't falling off track, and then we'd create a to-do list for the following day. This kept me aware and on top of all my social, academic, and career obligations. Now as I transition to my adult life after college, we've had fewer checkins, and I'm maintaining my own to-do lists independently.

Thanks to my community of supports, I came back from my disappointing freshman year and graduated from college. I'm now beginning my career as a programmer analyst at a major utilities company. and searching for my new community of supports as I begin this new part of my life.

AccessComputing Seeks Students in Computing Fields

AccessComputing is recruiting students with disabilities for a project funded by the National Science Foundation. AccessComputing provides opportunities for students to learn about resources, locate internships and other work experiences, participate in events, develop disability disclosure and accommodation strategies, and network with peers and mentors.

The AccessComputing project is recruiting high school, community college, undergraduate, and graduate students pursuing computing careers. The AccessComputing student team member application is available online at:www. uw.edu/accesscomputing/team_app.html. For more information, contact AccessComputing at 206-685-3648 (V/TTY) or accesscomp@uw.edu.



AccessComputing Team Member Profile: Svetlana



I was born with a severe form of cerebral palsy that affects most of my body. Throughout my life, I have had to overcome many obstacles, physical as well as social. In 2002, I came to the US from Latvia. My teachers refused to teach

me, reasoning that there would be no way for me to utilize anything I learned. At the time there were few, if any, accessible buildings and social stigma towards those with disabilities was high. However, time changes and today I can walk, though I do use a wheelchair at times, I'm pursuing a Ph.D., and I excel in my academic achievements.

I have always had a passion for knowledge. In 2005, I enrolled at Washington State University (WSU). I decided to pursue a computer science degree because it has such a large variety of applications. During my junior year, I participated in research for the first time through a Research Experience for Undergraduates program. I continued to build my research skills during the next couple of years as I participated in an undergraduate biology and mathematics program.

I graduated with a bachelor's degree in 2010 and stayed at WSU to pursue a Ph.D. in computer science. My Ph.D. research is centered on machine learning methods in high dimensional spaces (10 thousand plus dimensions). I apply it to a variety of fields including bioinformatics, neuroscience, imaging, and speech recognition.

I've put a lot of time and energy into my studies and that has really paid me back. My achievements have been recognized at the national level several times. In 2009, I was awarded the prestigious Barry M. Goldwater Scholar Award; in the 2010, I was chosen as a finalist Computing Research Association's Outstanding Undergraduate Research Award Competition; in 2011, I received a Graduate Research Fellowship from the National Science Foundation; and in 2012, I was awarded a grant to go to Norway to conduct research in neuroscience. At the Kavli Institute at the Center for Biology of Memory, I worked with Dr. May-Britt and Edward Moser, who shared this year Nobel Prize in Physiology or Medicine. My goal is to become a scientist and benefit society through my research, teaching, and scientific work.

Attending Conferences as a Student

Finding and going to conferences as a student can be a great way to build a network, learn important professional development skills, be exposed to new fields and job opportunities, or present your own research.

What conferences should you think about going to? *AccessComputing* students have attended a variety of conferences, including:

- Local computing, disability, or diversity related conferences
- Tapia Celebration of Diversity in Computing (*www.tapiaconference.org*)
- Grace Hopper Celebration of Women in Computing (*www.gracehopper.org*)
- Career Opportunities for Students with Disabilities Full Access Student Summit (www.cosdonline.org)
- ACM Special Interest Group in Computer Science Education (SIGCSE) (*www.sigcse. org/events/symposia*)
- ASSETS Conference on Computers and Accessibility (*www.sigaccess.org/assets*)
- The International Conference on Assistive Technology and Persons with Disabilities (www.csun.edu/cod/conference)

Interested in attending a conference? AccessComputing has limited funds to support student participants who are interested in attending conferences. For more information, contact AccessComputing at 206-685-3648 (V/ TTY) or accesscomp@uw.edu.

Internships, Scholarships, and Opportunities from Other Organizations

AAPD's Congressional Internship Program in Washington DC



The Mitsubishi Electric America Foundation and the American Association of People with Disabilities (AAPD) offer a congressional internship program for undergraduate students with disabilities. The

program provides an opportunity for students with disabilities to work in Washington DC for eight weeks and acquire valuable work experience to enrich their academic studies. As congressional interns, participants gain insight into congressional office operations, public policy development, and constituents' roles in the legislative and political processes. For more information and an application, visit *www.aapd.com/what-we-do/employment/internship-program/*.

Emerging Leaders Summer Internship Program for College Students with Disabilities



Coordinated by the National Business & Disability Council (NBDC) at The Viscardi Center, the Emerging Leaders internship program places top undergraduate and graduate college students with disabilities in fulfilling summer internships nationwide that provide them with meaningful

leadership development and networking opportunities. Visit www.viscardicenter.org/services/nbdc/emerging-leaders/students.html for more information.

Workforce Recruitment Program



The Workforce Recruitment Program (WRP) connects public and private sector employers with highly motivated postsecondary students with disabilities who are eager to apply their abilities in the workforce. Employers seek to fill both temporary and permanent positions in a variety of fields, using WRP applicants. During fall, students complete an online

application and participate in interviews. By late March, a database of student information is made available to employers. Interested employers make direct contact with students about internship and job offers. Ask your school's disability services or career services coordinator if your school works with WRP.

Check out internship programs at companies or organizations that you might be interested in working for. *AccessComputing* students have worked for a wide variety of employers, including: Amazon, AT&T, Bank of America, the Bureau of Labor Statistics, Cisco, the Department of Defense, Facebook, Google, IBM, Kaiser Permanente, Lawrence Livermore National Laboratory, Liberty Mutual, Microsoft, Prudential, Rockwell Collins, Yahoo!, and more.

This publication is meant only as a guide. Information should be verified with the sponsor and is subject to change.

Internships, Scholarships, and Opportunities from Other Organizations

ENTRY POINT! Summer Internship Opportunities



ENTRY POINT! offers outstanding internship opportunities for students with disabilities in a variety of fields, including computing. Students with disabilities can apply their skills in advancing science, serving society a real-world setting in competitive summer internships. For more information and an application, visit www.entrypoint.org.

Google Lime Scholarship



Google is committed to helping the innovators of the future make the most of their talents by providing scholarships and networking retreats for computer science students with disabilities. Recipients receive a scholarship, may be invited to attend the annual Google Scholars' Retreat at the Googleplex

in Mountain View, California, and are considered for internship opportunities at Google. Scholarships will be awarded based on the strength of candidates' academic background and demonstrated passion for computer science. For more information, visit www.limeconnect.com/ opportunities/page/google-lime-scholarship-program.

Career Opportunities for Students with Disabilities



COSD is a unique consortium composed of large and small universities, national employers, and US Government agencies focused on the career employment of college graduates with disabilities. Their conferences are a great opportunity to learn about careers. For more information, visit www.cosdonline.org.

Other Computing Internships

AccessComputing students have interned at a variety of organizations, including many universities, the federal government, Amazon, Bank of America, Booz Allen Hamilton, Cisco Systems, Cox Communications, Facebook, Google, IBM, Lockheed Martin, Microsoft, Red Hat, Rockwell Collins, Time Warner Cable, and Yahoo. Many students connect with internships through on campus interviews, job fairs, or other events organized by their universities' career centers. You can also visit the websites of these companies to learn more about their internships and how to apply.

> This publication is meant only as a guide. Information should be verified with the sponsor and is subject to change.



Scholarships, Career Exploration, and More

Be sure to check out the following resources from *AccessComputing* and DO-IT.

Choose Computing (*www.uw.edu/ accesscomputing/get-informed/why-choosecomputing*) encourages high school students with disabilities to pursue computing and IT careers. There you'll find profiles of successful computing students and professionals who happen to have disabilities, resources to learn more about careers in computing, and examples of computing projects.

The Student Lounge (*www.uw.edu/doit/ Student*) has information about resources and events designed to help you learn more about how to prepare for and be successful in postsecondary education and challenging career opportunities. Find information about academics, careers, college, your community, and disability resources.

Communication Access Realtime Translation (CART) Services for Deaf and Hard-of-Hearing People (*www.uw.edu/doit/Video/index. php?vid=57*) provides access to communication for individuals who are deaf; learn how CART might help you.

Our Scholarship listings (*www.uw.edu/doit/ Student/scholarships.html*) have something for all types of students, disabilities, and interests. Using an interactive sorting tool, you can filter scholarships by disability or other criteria. Information includes scholarship name, deadline, description, eligibility, and links to individual sponsors.

How can I get involved with undergraduate research?

Research internships present opportunities for undergraduates to gain an exposure to research and consider whether they are interested in research careers and graduate school. There are several programs that allow computing undergraduates with disabilities to become involved in research.

- The REU for Increasing Diversity (*www.pratt.duke.edu/reu/absher*) at Duke University offers research internships in engineering fields, including computer engineering, with an emphasis on including groups that are underrepresented, including students with disabilities.
- Distributed Research Experiences for Undergraduates (*parasol.tamu.edu/dreu/*) matches women and students from underrepresented groups, including students with disabilities, with a computer science or engineering faculty mentor for summer research experiences at the mentor's home institution.



Screenshot of DO-IT's Scholarship website

- The Summer Program for the Deaf and Hard of Hearing (*www.khri.med.umich. edu/training/senseprogram/summer.php*) at the Kresge Hearing Research Institute at the University of Michigan is a summer experience in biomedical sciences and computing.
- The Quality of Life Center at the University of Pittsburgh offers an REU Program (*www.qolt.pitt.edu/under/*) focusing on rehabilitation engineering and assistive technology fields. They encourage students with disabilities to apply.
- The Neuro-Engineering Summer Research Program (*biomedical.njit.edu/ neuroengreu/*) at the New Jersey Institute of Technology encourages applications from undergraduates in all engineering fields. A major thrust of this REU site is the inclusion of students with disabilities.
- There are many National Science Foundation sponsored sites for research experiences for undergraduates. Search for a site at www.nsf.gov/crssprgm/reu/reu_ search.jsp.
- Subject to funding availability, *AccessComputing* funds research internships for students with disabilities. To learn more, contact Brianna Blaser, at 206-685-3648 (V/TTY) or *blaser@uw.edu*.





Where can I learn more about computing education and careers?

There are countless resources online where you can learn about computing education and careers. Some of the resources we recommend checking out include:

Computing Degrees and Careers

(computingcareers.acm.org/)

The Association for Computing Machinery has resources to help you learn about computing education. Learn about preparing for computing majors, skills you'll learn, and about different computing majors.

The National Center for Women and Information Technology (NCWIT)

(www.ncwit.org/resources)

NCWIT also has many resources related to computing education, including: How can I prepare for a computing major? Which computing pathway is right for me? Which computing majors are right for me?

Association for Computing Machinery (ACM) Career News

(*www.acm.org/membership/careernews/*) Subscribe to this newsletter to hear about the latest in career-related topics.

CS Bits & Bytes

(http://www.nsf.gov/cise/csbytes)

The National Science Foundation's CS Bits & Bytes newsletter highlights innovative computer science research in an accessible way.

Disabilities, Opportunities, Internetworking, Technology

Based at the University of Washington, DO-IT serves to increase the participation of individuals with disabilities in challenging academic programs and careers. It promotes the use of computing and networking technologies to increase independence, productivity, and participation in education and employment. Check out this new video from DO-IT:

IT Accessibility: What Web Developers Have to Say. University web designers and developers discuss the importance of creating websites that are accessible to all users. Watch the video at www.uw.edu/doit/Video/index. pbp?vid=58.



Screenshot of IT Accessibility: What Web Developers Have to Say.

About this Publication

This newsletter is published by AccessComputing. Its purpose is to inform students with disabilities in computing about some of the many opportunities available to them. It is printed periodically. Submit content suggestions to Brianna Blaser at 206-685-3648 (V/TTY) or blaser@uw.edu. This publication was developed with funding from the National Science Foundation (#CNS-1042260). The contents do not necessarily represent the policies of the U.S. federal government, and you should not assume their endorsement.

Copyright © 2014, University of Washington. Permission is granted to copy these materials for educational, noncommercial purposes, provided the source is acknowledged.





Leaders

University of Washington Richard Ladner, Computer Science and Eng. Sheryl Burgstahler, DO-IT Center Brianna Blaser, DO-IT Center





For more information on *AccessComputing*, please visit *www.uw.edu/accesscomputing*, or email us at *accesscomp@uw.edu*.

Partners

AccessComputing engages with more than thirty postsecondary institutions and other organizations. Learn more at www.uw.edu/ accesscomputing/about-us/partners.