

Department of Computer Science



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What's New....



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From the Chair

As the academic year winds down, it is a pleasure to reflect on some of the past year's highlights. With funding from the Gianforte Family Foundation, the department has launched demand generation initiatives to better educate high school students about the exciting world of computer science and computational thinking. Professor and professional comedian, Hunter Lloyd, has traveled around Montana, introducing thousands of students to the wonderful world of robotics through a humorous presentation entitled "How to Train Your Robot".

I am currently privileged to be team-teaching a dual enrollment course at Bozeman High School with Kerri Cobb entitled "The Joy and Beauty of Computing". Twenty-five enthusiastic and talented students are taking the course. Team-teaching a high school class has given me the opportunity to reflect on pedagogy. Ultimately, one of the goals of education is to help each student realize his or her potential. A computing course has the added benefit of introducing knowledge that is both personally and professionally necessary in today's world.

I wish you an enjoyable and productive summer. If you would like to start learning JavaScript by playing a game, check out <http://codecombat.com>.

Happy Computing!

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CONGRATULATIONS

To the FTC Robotics team from the Sun River area for their **2nd Place finish at the FIRST Robotics Competition WORLD Championships!**
GREAT JOB!!



2014 CS Awards

Congratulations to our faculty and graduate student award recipients!

Outstanding Teaching Assistant

Eben Howard

Outstanding Ph.D. Researcher

Liessman Sturlaugson

Outstanding Faculty Service

Dr. John Sheppard

Outstanding Faculty Research

Dr. Qing Yang

Student Selected Teacher of the Year

Hunter Lloyd

What's Happening....

- ✦ The new CS Student Success Center lab will increase in size with the adjacent room being remodeled. More space will be available to students along with a designated tutoring center.
- ✦ The MSU Lunabotics team will travel to Florida to compete in NASA's Robotic Mining Competition, May 19-23, 2014. The competition will be streamed live.
- ✦ Big Sky Dev Con will be held at MSU June 7, 2014. For more information, please go to: bigskydevcon.org

Looney Challenges



Developed for K-12 students
to test their computing knowledge
and win Looney prizes!

Missed one or more challenges already?
That's okay. Start participating anytime!

Go to:

cs.montana.edu/csblog/looney-challenges.html

Join the Fun!

Demand Generation Initiatives Updates

The 2013-2014 academic year was a successful year for the CS Department's Demand Generation Initiative. The three strategies developed to increase enrollment and graduation in computer science have been implemented with Montana K-12 students and schools supportive of the programs. We thought we'd share some of the program highlights:

Robotics Outreach

- † Hunter Lloyd, CS Robotics Professor, and his robots visited over 60 Montana schools and community programs promoting computer science.

- † The Looney Challenges program was developed to help students test their computing knowledge while earning points to win Looney Prizes.

- † The CS Blog was launched to provide a venue to share interesting articles, announcements, photographs, video clips - anything computer related. Have a photo or interesting tidbit you want to share? Email Sharlyn, Sharlyn.Izurietta@coe.montana.edu and we'll post it to the blog for you!



The Joy and Beauty of Computing

- † Twenty-five students from Bozeman High School (BHS) enrolled in the pilot course taught by Kerri Cobb, BHS Business Teacher and John Paxton, CS Department Head.

- † Ninety-six have signed up to take the dual-enrollment course at BHS during the 2014-2015 school year.

Computational Thinking Course for Teachers

- † The course, *Computer Science in the Classroom: Computational Thinking for Teachers* (CSCI 591) is being offered at MSU, June 9-13th, 2014, to educators from Montana and the nation through MSU's Master of Science in Science Education.

There is still time to enroll!

!Robots!

Planning a visit to Bozeman or MSU? *The American Computer and Robotics Museum* has one of the most comprehensive exhibits on robotics, natural and artificial intelligence. The collection includes 5,000 years of cultural and technical objects. See a Babylonian Clay tablet, an original Apple 1 Computer donated by Steve Wozniak, and the first video games!

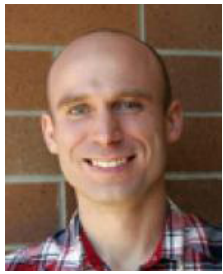
For more information, please go to: www.compustory.com, (406) 582-1288 or director@compustory.com.

Big Sky Dev Con 2014

Meet other techies, developers, designers, and tech-preneurs at the *Big Sky Dev Con Conference*, hosted by **Montana Programmers**. Established in 2008, the group has over 600 members. The conference will be held in the EPS Building at MSU, June 7th, 2014. For more information and how to register, please go to bigskydevcon.org.



Who's Who in the CS Department



Dr. Mike Wittie, Assistant Professor, has been a faculty member in the CS Department since 2011. Originally from Warsaw, Poland and Long Island, New York, Dr. Wittie completed a B.A. in Cognitive Science and an M.S.E in Computer Science from the University of Pennsylvania. He then moved west to California completing a Ph.D. in Computer Science at the University of California – Santa Barbara where he focused on networking.

Dr. Wittie's current research focuses on mobile networks. He also has active collaborations with the Western Transportation Institute at MSU. Other projects include understanding the impact of network delay on user experience with network applications and on speeding up privacy preserving communications.

In addition to research, Dr. Wittie also teaches computer architecture, networks, distributed systems, and advanced networking. Advising students, working to solve new research problems, and seeing students become capable at working with different concepts is the most rewarding part of his job.

When asked about the future of computer science, Dr. Wittie is most excited about the growing capability of networked systems to improve our decision making processes. His advice to incoming freshman? "Make friends in the program through tutoring or clubs in the CS Department. CS doesn't have to be a solitary endeavor and like anything, it's much more fun with friends."

Outside MSU, Dr. Wittie spends time with his border collie mix, Chief. He also teaches Tango in Bozeman, is a founding member of the MSU Tango Club, and teaches and practices Judo.

Kanji Image Translation App

Montana State University is proud of the opportunities provided to undergraduates to learn through hands-on research, and computer science students are no exception. This year two CS students, Adam Bartz and Alison Figueira teamed up to develop an application for Android smartphones.

Japanese On the Go, is a Japanese kanji image translation application that works by simply taking a photograph of a kanji character. The application utilizes the Tesseract Engine to recognize the kanji characters and then searches the WWWJDIC dictionary.

Image translation is still a young and developing technology with room for improvements in translating language. The students are planning to continue developing the application and eventually make it available to download. For more information, please contact the CS Department.

Here's how it works:

Step 1

Step 2

Step 3

Step 4

HELP US REACH OUR GOAL OF 1000 Friends on Facebook!

Go to: www.facebook.com/looneytherobot