Student projects
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Ph.D. program now at 12
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Media, Arts and Performance
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Four students join Ph.D. program

The ATLAS Ph.D. program in Technology, Media and Society has grown to 12 students with the addition of four students who have been accepted to the program for the fall.

The new students are:

Kara Behnke

Kara Behnke is a 2010 graduate of the University of Colorado with a bachelor's degree in Japanese, a minor in Chinese and a minor in the ATLAS Technology, Arts and Media program.

Her goal in the Ph.D. program is to help increase women's participation in computer science through the engaging technologies of video game development. She plans to explore the reasons for decreased enrollment of women in computer science within the United States, China and Japan.

"By utilizing the creativity and science embedded in game design, I hope to encourage and increase women's participation in this growing, innovative industry," she said.

Casey McTaggart

Casey McTaggart is a 2009 graduate of the University of California, Berkeley, with a master's degree in environmental engineering. She graduated from Princeton University with a bachelor's degree in computer science in 2001. She worked for six years at Pixar Animation Studios, where her projects included Finding Nemo, the Incredibles and Ratatouille.

As a Ph.D. student, she plans to work with computer science professor Leysia Palen on crisis informatics, health informatics and methods of pre-hospital information gathering, retrieval and organization in resource-limited areas.

Heather Underwood

Heather Underwood graduated with a computer science degree from the University of Washington in 2009, where she developed MultiLearn, a single-display groupware system for elementary education using game models. She conducted several field tests of MultiLearn in Bangalore, India, which stimulated her desire to travel and learn about cultures worldwide.

As a Ph.D. student, Underwood plans to combine and expand her technical background with studies in public health and policy to ultimately create cost-effective, sustainable health-related solutions for the developing world.

Joanne White

Joanne White has just completed a master's thesis through the School of Journalism and Mass Communication at CU on the strength of connections made in social media communities, with a focus on mom bloggers.

White is director of the 60-week program at Boulder Digital Works, which is a joint effort of CU's School of Journalism and Mass Communication and the College of Engineering and Applied Science. The program focuses on developing digital leaders and entrepreneurs.

Prior to moving to the United States in 2008, White wrote and delivered national framework tertiary curriculum for marketing, advertising and journalism courses in Australia. She has worked in media and communications for 20 years throughout the Asia Pacific region.

She has a bachelor of arts degree with a major in communication from Griffith University, Qld, Australia, and a graduate diploma in vocational education and training from Charles Sturt University in NSW, Australia.

A graduate of Silicon Valley's Founder Institute, White is co-founder of the social media analytics tool Tribevibe and also is co-founder/director of Connect.Us Labs, a consulting company focused on social, Web and emerging media.

She is active on Twitter at http://twitter.com/Mediamum and is the mother of four children.

TAM enrollments at 450

Enrollment in ATLAS Technology, Arts and Media certificate and minor programs reached a record 450 students this spring, with 46 students graduating with a minor degree and nine with the digital media certificate on May 6.

Dave Kalahar noted that when he first became TAM adviser in 2004, enrollments totaled only about 125 students.

Students in the School of Journalism and Mass Communication had the largest enrollment, with 188 students, followed by studio arts with 55, film with 33, architecture with 30, business with 29 and engineering with 20.

TAM also held its first “TAM Networking Event,” in conjunction with Career Services, on March 10. Representatives of multimedia companies came to ATLAS to meet and talk informally with students about careers. Despite inclement weather, about a half-dozen companies were represented and they met with about 50 students.
Barbie as a computer engineer: The Mattel doll sports black leggings, a top decorated in binary code that spells Barbie, pink glasses and a Bluetooth headset. Mattel offered a chance for people to vote on a career for a new Barbie: The Wall Street Journal reported that female computer engineers used Twitter to influence the vote. The doll will begin shipping in October.

NCWIT offers perspective about new Barbie to Wall Street Journal

The Wall Street Journal cited NCWIT statistics about the declining number of women earning computer science degrees in an April 9 page one story about the upcoming release of a new computer engineer Barbie doll.

The newspaper cited NCWIT statistics that stated that only 18% of computer science degrees were awarded to women in 2008, down from 37% in 1985.

A companion article in the Journal’s “Digits” blog extensively quoted NCWIT’s Catherine Ashcraft about the inaccurate image of women and computer science and the lack of female role models and mentors.

“Girls get subtle messages from all sorts of places — the media, popular culture, parents, teachers, school counselors, other authority figures — that computer science isn’t really ‘something girls do,’” Ashcraft was quoted as saying.

The Wall Street Journal said a campaign by female computer engineers influenced a Mattel company Web site vote on which career a new Barbie doll should represent.

See: http://x2c.eu/0h and http://x2c.eu/0i.

Sieber named President’s Teaching Scholar

Diane Sieber, associate professor of humanities in the CU College of Engineering and Applied Science and an ATLAS Board member and co-founder, has been named a University of Colorado President’s Teaching Scholar.

Sieber was named to the honor for her dedication to excellence in teaching, creative work, scholarship and research. Seventy-four professors have received the recognition since 1989. They serve as teaching and research ambassadors on their respective campuses, and develop individual, departmental and campuswide projects to assess classroom learning.

Sieber is well-known for her interdisciplinary scholarship and her keen ability to establish a rapport with students through the use of digital technology. She served as co-director of ATLAS, was the first director of the Technology, Arts and Media program starting in 1998, and has been director of the Herbst Program of Humanities in Engineering since 2004.

Raised in Spain, she pursued undergraduate studies in Spanish and Russian literatures and in history at the University of Virginia and earned her master’s and Ph.D. degrees in romance languages at Princeton University.

Campuswide call for proposals yields Black Box events schedule

Michael Theodore, director of the Center for Media, Arts and Performance, held a question and answer session for faculty and students in the Black Box Studio in February to introduce them to technologies available in the performance space and to solicit proposals for multimedia performances or art installations.

The Q&A was held following an online and campuswide e-mail call for proposals asking faculty or students interested in using the Black Box to submit proposals for interdisciplinary projects or performances.

Theodore said he received numerous inquiries following the call for proposals before holding the Q&A in the Black Box.

About 20 people attended the event and proposals were made in the following categories: music, dance, creative writing, anthropology, film, music, theater and fine arts.

A subcommittee of the center’s Advisory Committee reviewed the proposals and sent recommendations to the full committee.

The proposals will form the basis for student and faculty Center for Media, Arts and Performance projects for the next year.
Multimedia Double Feature:
“There Came a Voice” (above and at right) and “She” (in two photos below) were performed in a dual billing April 2-3 in the Black Box. “There Came a Voice,” designed and directed by Jacob Herold, evoked an ancient mountaintop encounter. “She,” directed by Esmeralda Kundanis-Grow, Mara Tasker and Nathan Minatta, fused live dance and film to create a montage to bring a Tarantino-style femme fatale to life.
‘She Waded in Time’

Dramatic lighting, aerial dance and artistic costumes combined for the May 1 production of “She Waded in Time,” a work directed by master of Fine Arts students Nicole Dagesse and Tara Rynders. The show was part of a double billing, which also included “Tethered,” a multi-sensory music/art installation produced by Maximilian Shiffman.
Music, video and technology...

Laptop Orchestra: The Boulder Laptop Orchestra (BLOrk) performed in a rhythmic, musical and visual collaboration on March 13 in the Black Box. The ensemble consists of six performers each equipped with a laptop, a hemispherical speaker, and a variety of control devices. The evening featured guest artist Janet Feder of Naropa Institute on guitar. In the photo at left, BLOrk members play a piano and pluck its open strings while an overhead camera captures the scene and displays it on a screen.
...a three-day fusion

“Safari Trio,” “Psychoangelo,” “Memory and the Internet:” College of Music instructor John Gunther’s “Safari Trio” (top photo, with Gunther in center) performs March 12 as images from a museum are projected behind; Center for Media, Arts and Performance director Michael Theodore (right photo, with Theodore in center) performs his “Psychoangelo” show the same evening; in photo at left, an ensemble led by Gunther performs March 14 in the Black Box while dancers from New York University dance to the music remotely and an artist in Korea responds to the dance with ink drawings in the projections on the curtain behind.

Pendulum New Music: Members of Pendulum New Music perform a concert entitled “A Night in the Black Box” on Feb. 17. The event featured works by Hunter Ewen, Kari Kraakevik, Nathan Wheeler Jeffrey Nytch and Liz Comninellis. The Pendulum series, which is in its eighth year, features faculty, student and guest performers in monthly concerts in Grusin Music Hall and ATLAS. Pendulum takes its name from the Foucault pendulum at CU’s Duane Physics Laboratory.
‘My Name is Lily Foster’ soars

“Hullo, My Name is Lily Foster,” an interdisciplinary production, combined music, modern and aerial dance, visual arts, poetry and video in a Black Box performance on Feb. 27. The production was written and produced by Hunter Ewen, a College of Music doctoral student. Actress and soprano Elizabeth Comninellis played title character Lily Foster.

Jim Permanent/Ross Hagen: Jim Campbell (aka Jim Permanent), left, is inspired by proponents of experimental work with vinyl, both avant-garde and hip-hop. Ross Hagen, right, a College of Music instructor and doctoral student, uses a combination of acoustic instruments with analog synthesizers, hardware effects units and manipulated field recordings. Both appeared in a double-bill April 10 in the Black Box.
Communikey celebrates electronic arts

Festival April 14-17 features workshops, performances

Lucky Dragons: Hardware and software translates data generated by skin contact into visualizations and sound in a performance by Lucky Dragons of Los Angeles. The group also held a series of workshops.

Tesla coil creates music, visual effects: Artificiel, a group based in Montreal, Canada, performed its latest project, POWER, which uses an audio-modulated Tesla coil as a live instrument that creates spectacular electric patterns.

Mad Scientist: Xavier van Wersch, a native of the Netherlands, manipulates sound and music with his hands and body in an experimental mad scientist performance.

Blending Sounds: Audience members were encouraged to bring their own instruments, music loops, drum machines, sequencers, mixing boards and voices to a music fusion workshop conducted by D Numbers, a three-person group from Santa Fe.
Technology, Arts and Media student projects

ATLAS building fills with art: As the spring semester came to a close, the ATLAS building came alive with installations of student projects on the walls throughout the first and second floors, on the video wall, outside LCD video panels and the lobby kiosks. Above in three of seven artworks, Lindsey O’Brien, a communications major, represented the Seven Wonders of the Digital Age in a project entitled “Seven Wonders Then and Now.”

“A Window into Reality:” Sarah Leighton’s movie, which was displayed on the LCD video screens on the outside of the building, created a nearly still portrait that surprised people with a quick lick of the lips.

Projects on the cover

Top photo: “Recycling Originality” - Carolyn Scott, a film production/film critical studies student, says her project is a “visual investigation into the filmic influences that shaped James Cameron’s ‘Avatar.’” The artwork contains 3,600 frames from about 40 sources, with each one referencing Avatar visually or contextually.

Bottom left photo: “The Color of Music” - Amy Vanchina, a design studies major, created a series of artworks, each one a variation of a color, noting that “Isaac Newton discovered that the seven colors on the color wheel correspond to the seven notes in a major musical scale.”

Bottom right photo: “Digesting a Gust of Wind” - Danielle Larson, an advertising major, used strips of cloth draped over canvas as a projection screen that hung from a ceiling in ATLAS. She then projected a movie/collage she created depicting “Techno-Stress,” caused by technological change and using many forms of communications devices, all “while digesting a gust of wind for breakfast.”

Capstone projects on Web

Go to http://x2c.eu/0j

- TUCU 2010
- CU Underground
- The Hive
- Synesthesias
- Untitled
- Design as a Transmedia
- Thoughts
- Color Portrait of the Late 19th and 20th Century Paris
- For More Than Just Their Tagline
- Screen Through Time
- Technology in Disasters
- TECHNOLOGY
- TUCU Technology Usage at CU
- NIKEvolution
- Reddiction
- ICT4D: Making the Change in Underdeveloped Countries
- My Life in Boulder, Colorado
DigitalCUrrents gets donations from ViaWest and Xcel Energy

Xcel Energy and ViaWest have donated a total of $15,000 to support the DigitalCUrrents program this summer.

DigitalCUrrents, hosted by ATLAS and NCWIT, will be partnering with Denver North High School’s Computer Magnet program.

Students will create a documentary film commemorating North’s 100th anniversary, using the Google SketchUp computer modeling program as well as other video editing and animation programs.

DigitalCUrrents high school participants also will be mentoring Denver middle school students interested in becoming a part of the Magnet program in the fall.

The Xcel Energy Foundation Board of Directors last week decided to grant the ATLAS Institute and NCWIT $10,000 toward this year’s summer workshop.

The donation will go toward stipends for the participating North High School students and resources necessary for running the camp.

Xcel Energy provides services and energy products in Colorado and nationwide. The grant was part of Xcel’s focus area grants that support education, the environment, economic sustainability and arts and culture.

For the second year, ViaWest has donated $5,000 to the program, courtesy of co-founder and COO Nancy Phillips.

Headquartered in Denver, ViaWest provides collocation, managed hosting solutions and services to over 1,300 mid-sized and enterprise level businesses nationwide.

Technology entrepreneur Tal Keinan featured in ATLAS Speaker Series

Tal Keinan, founder and CEO of SemantiNet, an Israeli company, gave a talk entitled “Natural Language Processing and the Semantic Web” Feb. 1 as part of the ATLAS Speaker Series.

Keinan (in photo above) gave a presentation about the company’s flagship project, Headup, which is a content enrichment platform for publishers and bloggers that analyzes content, identifies key terms and automatically provides readers related material from social networks and popular Web services.

SemantiNet’s goal is to make the variety and richness of content that exists on the Web accessible to people in ways that are simpler, smarter and more intuitive. The company’s technologies are designed to understand the relationships between objects on the Web. It aggregates information from multiple relevant data sources to provide a socially-enhanced “content serendipity” experience for end users.

Prior to founding SemantiNet, Keinan worked at Morgan Stanley’s Risk Management Department where he was in charge of the bank’s scenario analysis product. Keinan served in the communication department of the Israeli Army’s leading computer division.

Following his army service, Keinan worked for the government of Israel’s mission to the United States. In 2004, Keinan graduated with honors from Columbia University with a B.S. in computer science and economics.

The ATLAS Speaker Series is made possible by a generous donation by Idit Harel Caperton and Anat Harel.

‘InPassing’ documentary draws overflow audience

“InPassing,” a documentary produced by CU students Anthony Hull, Ryan Simpson, Tyler Adams and Maria Genao-Homs, who is a Multicultural Affairs staff member, premiered April 23 to an overflowing crowd in several rooms in ATLAS.

The film featured interviews with four students and highlighted their stories and aspirations. “People have stories. And do extraordinary things. But do we ever take the time to find out? I did,” said Hull.

Audience members filled the Cofrin Auditorium, the film screening room and the lobby video wall area during the movie.

A question and answer panel session followed the movie. The event was part of the ATLAS Speaker Series, which is made possible by a generous donation by Idit Harel Caperton and Anat Harel.
Adams City students win scholarships in competition

Fourteen students from Adams City High School won scholarships to the University of Colorado at Boulder following a series of competitions March 11 at CU.

The competitions included challenges hosted by programs in the CU-LEAD Alliance, including ATLAS.

Technology Arts and Media program director Joel Swanson and Anthea Johnson Rooen, director of ATLAS outreach programs, challenged the students to design a poster to advertise their high school using Photoshop and green screen technology, all within 35 minutes.

After competitions in two other programs on campus, the Adams City students scored the highest number of total points and won the scholarships. The competition is sponsored by the CU Office of Admissions through its Denver Area Visit program.

Under the program, the top 10% of students of color from 20 schools in the Denver metro area are invited to compete. The scholarships begin in the fall.

Middle, high school students tour ATLAS in precollegiate program

ATLAS hosted a group of five students for a tour of the Black Box and broadcasting facilities Feb. 27 as part of an extensive CU Office of Diversity, Equity and Community Engagement Pre-Collegiate Development Program.

The program is designed to motivate first-generation students who are currently in middle school or high school and to help prepare them to pursue higher education.

In January, ATLAS Outreach director Anthea Johnson Rooen led ice breaker and team building programs for 40 multicultural students.

From January to April, students spent one Saturday a month at CU learning about opportunities available to college students, and they developed a final presentation on what they learned.

ATLAS information available on several social networks

Several ATLAS social networking sites are now accessible from the ATLAS Web site, which is located at http://atlas.colorado.edu.

The home page also includes a live stream of Twitter posts from ATLAS and from friends of ATLAS. Other sites include:

- An RSS feed of ATLAS' calendar.
- A Facebook page highlighting ATLAS events and student projects.
- A blog, written by ATLAS staff members, about ATLAS, its programs and technologies of interest.
- Twitter, which is highlighting ATLAS events, news and the creative works of ATLAS students.
- YouTube, which features video of student projects and Center for Media, Arts and Performance events.
- Flickr, featuring photos of ATLAS events, people and projects.
Polese wins NCWIT Symons Award

Kim Polese, who is CEO of SpikeSource, co-founder of Marimba, the original product manager of Java at Sun Microsystems, and one of Time Magazine’s “Most Influential Americans,” is the winner of the 2010 NCWIT Symons Innovator Award.

The NCWIT award was created to inspire women to pursue information technology entrepreneurship by honoring an outstanding woman who has successfully built an IT business.

The award is named for Jeanette Symons, founder of Industrious Kid, Zhone Technologies and Ascend Communications, and an NCWIT Entrepreneurial Hero whose pioneering work made her an inspiration to many.

The award will be presented at the 2010 NCWIT Innovator Award celebration on May 20 at the OHSU South Waterfront Atrium in Portland, Ore.

More information is at http://www.ncwit.org/symonsaward.

32 young women receive Aspirations in Computing awards from NCWIT

Thirty-two young women received NCWIT Award for Aspirations in Computing March 27 at Bank of America’s headquarters in Charlotte, North Carolina.

The winners are from big cities, suburban communities and rural areas in 18 states, and attend private, public and home-school institutions.

Bank of America Global Technology & Operations executive Cathy Bessant keynoted the award event and renewed Bank of America’s support for the award through 2014.

NCWIT Board chair Brad Feld, who took part in the celebration, was so inspired by the young women that he spontaneously offered each award winner a $1,000 scholarship from his foundation.

The NCWIT Award for Aspirations in Computing is the only award of its kind to recognize young women at the high school level for their participation in technology and their plans for a tech-related career.

For the 2010 award, NCWIT received 700 applications from young women in all 49 states, Puerto Rico, and several US military installations overseas.

With funding from the Motorola Foundation, Microsoft and Google, NCWIT will be expanding the award with competitions in the Denver Metro area, Portland Metro area and the Bay Area.

More information is at http://www.ncwit.org/award.

Research Center news

Kim Kalahar traveled to Los Angeles as part of the National Science Foundation Gender in Science and Engineering’s first meeting of combined Extension Services projects. Extension Services projects are developing a cadre of agents through training, consulting, implementation assistance and reporting on experience in the field.

Kalahar also organized nine alliances in a shared booth at the ACM Special Interest Group on Computer Science Education in Milwaukee. This was the third year she has organized this booth.

Additionally, she has become the program manager for the NCWIT Academic Alliance. Kalahar will manage nearly 100 undergraduate computing programs that are part of NCWIT’s Academic Alliance.

Tim Weston recently received funding from Toyota and Xcel to evaluate how consumers using experimental electric cars interact with Boulder’s Smart Grid.

The study will examine how consumer perceptions and behaviors around energy use change when they are given an electric car for three months.

Weston is also completing work on the ICARE test, which will allow dramatically faster diagnostic assessment of reading for elementary school students.

Sarah Hug traveled to Los Angeles to join the Broadening Participation in Computing community at its annual conference.

She also co-authored a submission for the Transactions of Computing Education special issue on broadening participation regarding the Computing Alliance for Hispanic Serving institutions (CAHSI), and gave a talk on gender and technology at the first Fem Prof retreat held in Puerto Rico.

Hug continues to evaluate Broadening Participation in Computing higher education projects sponsored by the National Science Foundation. Her evaluation analysis was presented at the SIGCSE conference in Milwaukee in March.

In May, Hug will present her work on scientific identity development in undergraduate research groups at the American Educational Research Association.
Game development involves a rich set of interrelated fields including computer science, graphics design, physics, music and narrative.

And this spring, ATLAS director John Bennett’s new ATLAS course, “Computer Game Development for the XBOX 360,” attracted a diverse group of students. The majors of the 22 students in the course included music, communications, architecture, English, fine arts and computer science.

The course, which was the first XBOX game development course taught at CU, sought to introduce the fundamental principles of computer game development.

While the course involved extensive programming, students were required to have only introductory programming experience to register.

Students used C# and the Microsoft XNA Game Development Framework to develop 2D and 3D games.

The Alliance for Technology, Learning and Society (ATLAS) at the University of Colorado at Boulder was established in 1997 as a campus-wide interdisciplinary initiative.

ATLAS broadens the benefits of the networked information age by providing multidisciplinary curricular, research and outreach programs that integrate information and communication technology with a wide variety of disciplines and people, both inside and outside the university.

More information about ATLAS and its initiatives can be found at http://atlas.colorado.edu.

To contact ATLAS, call 303-735-4577 or e-mail cuatlas@colorado.edu.

Follow ATLAS on the Web at http://atlas.colorado.edu, and on: