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A record number of students - 153 - graduated from ATLAS programs May 9, with ceremonies held in Eaton Humanities to accommodate the large audience. In the photo at top, ATLAS director John Bennett gives his commencement address, with faculty and staff in the background; above, Revi Sterling, director of the Information and Communications Technology for Development (ICTD) master’s degree program addresses the crowd, with the five graduating master’s degree students in the foreground; at left, ATLAS associate director Jill Dupré hoods Ph.D. graduate Meg Leta Ambrose, whose dissertation examined the right to be forgotten in the digital age. Eighty-seven students earned their ATLAS Technology, Arts and Media Certificate of Digital Media; 60 students earned the ATLAS minor in Technology, Arts and Media.
Graduate students in the ATLAS Master of Science in Information and Communication Technology for Development (MS-ICTD) program in April presented the work they have accomplished during their practicum semester.

The practicum portion of the program consists of an internship or service project with a company engaged in ICTD efforts, an international development agency, foundation, non-governmental organization, or other organization in the public or private sector.

The ICTD practicum program matches students with the organizations. The students work in ICTD design, deployment, monitoring and evaluation while being mentored by experts across development sectors.

Practicums have often led to full-time employment, as well as ongoing lab and research projects.

The graduate presenters were:

- Chris Carruth – Participatory media with the South Sudanese diaspora
- Neil DiMuccio – Usability and scale of microfinance applications in Kenya
- Mustafa Naseem – Internet policy at Verizon headquarters, Washington, D.C.
- Joellen Raderstorf – Integrating energy and ICT networks in Namibia.
- Isla Schanuel – Aggregated needs/services platform for Broomfield County.
- Abigale Stangl – Texture-based technology for the visually impaired at the Sikuli Lab, CU.
- McClees Stephens – Livelihood and capacity building in the Amazon.


PRACTICUM PRESENTATIONS:
Among the presenters were Chris Carruth, top left; Isla Schanuel, top right; Joellen Raderstorf, above left; Neil DiMuccio, above right; and, lower right. ICTD program director Revi Sterling, left, and McClees Stephens.
ATLAS Research Roundup

Ph.D. candidate Heather Underwood is competing in the Grand Finals of the Student Research Competition (SRC) of the Association for Computing Machinery (ACM) for her research paper entitled “PartoPen: Enhancing the Partograph with Digital Pen Technology.”

Underwood is developing the PartoPen, which is an interactive digital pen-based system that reinforces birth attendant training, records labor progress, validates form data, and overall aims to improve maternal outcomes in developing countries. Underwood received a first-place ranking in the student research competition for this paper at the CHI 2012 Conference on Human Factors in Computing Systems held last May. Separately, Underwood received the best student paper award during the International Conference on Health Informatics held March 3-6 in Angers, France. She was the lead author for a student paper award during the 2012 Conference on Human Factors in Computing Systems held last May. Separately, Underwood received the best student paper award during the International Conference on Health Informatics held March 3-6 in Angers, France.

She was the lead author for a paper entitled “PartoPen in Training and Clinical Use – Two Preliminary Studies in Kenya.” ATLAS director John Bennett and ATLAS ICTD program director Revi Sterling were co-authors.

ATLAS Ph.D. student Kara Behnke continued her work as a National Science Foundation GK-12 ECSITE Fellow. She worked with students from Skyline High School in Longmont to program and use Microsoft’s Kinect as an art piece for their annual Fine Arts Festival. This project was intended to coordinate the Visual Performing Arts students with the Computer Science Club students and produce a collaborative art/CS project for the Fine Arts Festival.

In March, she presented a poster at the SIGCSE Student Research Competition, entitled “Slash: Side-by-side block and procedural programming in an introductory computer science course.” She presented the learning metrics of the FS2LSL tool that was used in ATLAS director John Bennett’s Second Life course.

She also submitted a paper with ATLAS Ph.D. student Meg Ambrose to the Internet Research conference, entitled “Must be 13 to Play: Addressing Children Participation in Networked Games.” This paper discusses the legal issues behind online mobile app games designed for children.

She also was recently accepted to present a poster at the Games, Learning & Society conference in June. The paper is called “Games for Development: Using the SGDA Framework for Assessing Serious Games and ICTD.”

Rachel Strobel, a student in the ATLAS master’s program in Information and Communications Technology for Development (ICTD), is working for Workforce Boulder County (WfBC) and is developing a content management system to engage youth, assist them with exploring the world of work and careers, and tell them about WfBC’s resources. She is working with students from Skyline High School, a STEM school in Longmont, as they develop this technology.

Strobel also is a finalist in the United States Agency for International Development (USAID) Challenge Slavery Tech Contest, which is designed to highlight ideas to combat human trafficking. Her entry was entitled “A Mobile Phone Technology Solution for Countering Human Trafficking in Mexico.”


Sarah Vieweg, whose ATLAS Ph.D. dissertation explored the use of Twitter during mass emergencies, was interviewed by Bloomberg television about the use of social media following the Boston Marathon bombings.

In the interview, Vieweg said she believes that the social media response to the tragedy might have been the largest in history. The video is at http://bloom.bg/ZtCo41. Vieweg received her ATLAS Ph.D. in Technology, Media and Society in May 2012 and is a project manager at Oblong Industries.

ATLAS ICTD program director Revi Sterling presented new research on ICTD, mental health and gender at the University of Michigan “Cell and Self” conference from April 25-27. The conference is sponsored by the UM School of Information and the UM Medical School.

Kate Starbird, an ATLAS Ph.D. graduate who is now a Human Centered Design & Engineering (HCDE) professor at the University of Washington, and CU professor Leysia Palen have received a best paper award at the 2013 Computer Supported Cooperative Work and Social Computing (CSCW) conference from Feb. 23-27 in San Antonio, Texas. Their paper, “Working and Sustaining the Virtual ‘Disaster Desk’,” follows the trajectory of Humanity Road, a volunteer organization working within the domain of disaster response, from an emergent group to a formal nonprofit.

Starbird also recently authored an article in the IEEE magazine Computer, which focused the March issue on gender diversity in computing. Her article, entitled “Returning to My Inner Nerd: Following the ‘Social’ Disruption of Computing,” traces her experiences as a Stanford computer science undergraduate, a basketball star both in college and professionally, and as an ATLAS Ph.D. student.

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Ph.D. program grows to 18 students

Six students, including a graduate of the ATLAS master of science degree in Information and Communications Technology for Development (ICTD), have been accepted into the interdisciplinary ATLAS Ph.D. program in Technology, Media and Society.

The total number of fall Ph.D. students now is 18.

The ATLAS Ph.D. program is intended for highly motivated students whose interdisciplinary interests at the intersections of technology, media and society are not met well by traditional Ph.D. programs. Each student in the program forms a faculty committee appropriate to his or her interests from the outset and works with that committee to construct a set of courses and candidacy exams customized to those interests.

Richelle Cripe is a 2007 graduate of the University of Kentucky with a bachelor’s degree in Fine Art, a minor in Art History, and coursework in Music, Architecture and Computer Science. She traveled through parts of India, Europe, Africa and New Zealand after graduation, which stimulated her desire to learn more about populations worldwide. As a Ph.D. student, she plans to create new avenues that allow under-represented populations the opportunity to access and contribute to the emerging culture of participation, and to use modern technology as a way to capture creative output from populations that have limited access to the global artistic community.

Megan Kinney has more than 10 years of experience in connecting traditionally under-served groups to useful technologies. As a librarian, she has helped refugee youth use GIS mapping to improve their neighborhoods, recent immigrants learn how to send an email, Denver citizens how to apply for the housing lottery online, community college students to embrace the importance of solid research and critical thinking skills. What’s next? Working with female prisoners to give them the digital literacy skills needed to succeed outside of prison and avoid recidivism.

Brit Kos, a Colorado native, recently obtained her master’s degree in Computer Science from CU, where she also received her bachelor’s degree in computer science. Her background includes web development and an interest in advances in digital media.

Hyunjoo Oh is interested in designing motivating experience with interactive technology to support creative activities. She studied graphic design and media interaction design from Ewha Womans University in South Korea and received a master’s degree in Entertainment Technology from Carnegie Mellon University, where she explored edutainment and tangible interaction related projects. Her research interest involves design, HCI, technology and learning.

Robert Soden has been working at the intersection of community mapping, new technology and environmental modeling for over a decade. As a founding member of the Humanitarian OpenStreetMap Team who most recently worked with the World Bank’s Global Facility for Disaster Reduction and Recovery, Soden has worked or lived in over two dozen countries.

Abigale Stangl is a spring 2013 graduate of the ATLAS Information and Communications Technology for Development (ICTD) master’s degree program, where she has focused on user-centered design, human centered computing, accessibility and gender empowerment. As an ATLAS Ph.D. student, she will work on projects that strive to improve emotional health and well-being for individuals and communities through the application and development of technologies.

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Ph.D. student Kevin Moloney will be presenting his paper “Transmedia Journalism as a Post-Digital Narrative” at the annual conference of the Media Ecology Association in Grand Rapids, Mich., in June.

Ph.D. student Josephine Kilde was awarded summer fellowships at Los Alamos National Lab and at Oak Ridge National lab. This summer she will be at Los Alamos National Lab working on developing a web application to train pathway to mathematical concepts and logic for K-12 teachers in reservation schools in Northern New Mexico.

ICTD master’s student Aaron Vimont will intern this summer at the FCC. He will be working for the Accessibility and Innovation Initiative, which is trying to close the accessibility gap through technology, during the 10-week internship.

Ph.D. student Jiffer Harriman has been working on an interactive sound art installation with ATLAS Center for Media, Arts and performance director Michael Theodore. The installation, which will be on display for three weeks, opened May 11 at the David B. Smith Gallery in Denver.
DJ SPOOKY –
Paul Miller (aka DJ Spooky) discussed his recent work mixing and exploring digital media, music and the ways that art can open minds and help people gain new perspectives on issues like climate change during a Speakers Series performance in February.

The ATLAS Speakers Series is made possible by a donation from Idit Harel Caperton and Anat Harel. For videos of the speakers, go to http://www.colorado.edu/atlas/speakerseries/.

NICOLAS JAAR – Nicolas Jaar, an international multi-media performing artist, talked about his digital music work and creative process during an ATLAS Speaker Series presentation in April. At right is Kate Lesta of Communikey, which co-hosted the event.

ELECTRONIC ARTS – Leah Buechley, who received her master’s and Ph.D. degrees in computer science from CU and is currently an associate professor at MIT and directs the High-Low Tech Media Lab, discussed sketching, painting and sewing with electronic technology in April.

SPEAKER SERIES – Ge Wang, a Stanford University assistant professor in the Center for Computer Research in Music and Acoustics, discussed the transformative possibilities of music and computing to make art and strange new instruments, including his app that turns an iPhone into a flute, during an ATLAS Speaker Series presentation in March.
SOUNDS OF THE SUN: The Boulder Laptop Orchestra (BLOrk), which is the ensemble-in-residence at the ATLAS Center for Media, Arts and Performance, used traditional acoustic instruments, iPads, laptops, SuperCollider software, hemispherical speakers and a gesture-controlled computer in a unique multimedia performance March 2 in the ATLAS Black Box. In one of the pieces, students performed along with synthesized sounds based on data emitted by the sun in a piece entitled “Sounds of the Sun.”

CANVAS: CU College of Music doctoral student Cole Ingraham (above) used an iPad, Moog guitar and other electronics to create an animated video painting in February in the ATLAS Black Box.

BRAIN PULSE MUSIC: Masaki Batoh (at left in the photo at right), who is a member of the Japanese experimental rock band Ghost, performed with his Brain Pulse Music machine, which uses brain waves to produce sounds and music, as part of a Communkey Festival of Electronic Arts program in April in the ATLAS Black Box.
As the spring semester comes to a close, ATLAS capstone course student projects go up throughout the Roser ATLAS building. At right, Roberta Casnelli, a communications major, created a series of artworks that combined photographic self-portraits with photos of landscapes to represent how the human body is a vessel for the experiences and histories of the individual.

THE SEVEN WONDERS OF INSTAGRAM:
Lauren Haimbaugh, a broadcast production major, created seven separate composite artworks, each representing one of the Seven Wonders of the World, by combining and digitally arranging 1,000 Instagram social media photos into each artwork.

3D PRINT EXPERIMENT:
Nate Boit, a history major, used 3D software to create a small model of a skateboard, then printed the full model using a 3D printer. He then hand painted a mad scientist graphic on the board.

BALANCE IN CHAOS:
Jessica Wolf, a communications major, created an artwork that symbolizes the need for balance in a world that includes demands as a worker, student, intern, parent, provider, advocate or friend.
BDW class fosters six startups

BDW, which is the post-graduate studio of the ATLAS Institute, hosted its annual PitchFest event in the ATLAS Cofrin auditorium April 30, giving students in the BDW StartUp course a chance to pitch their ideas for new businesses.

PitchFest is the culmination of the 15-week class, led by Robert Reich and supported by business leaders who mentor the students.

Six teams of students presented their concepts to an overflow crowd of people that included students, the mentors and experts who offered opinions about the presentations and the concepts.

In the end, one startup business -- called piq -- was favored by a panel of judges.

The piq team, consisting of Aayush Iyer, Joe Saperstein and Matt Flesher, pitched a business that would allow people to influence what music is playing at a party, business or any social space by allowing them to connect to a device and democratically influencing the music that is playing.

The five other teams, members and concepts were:
- **MyCubbies** – Lauren Mosenthal, Amelia Towle and Julie Miller – creates a “search bar to your home.” The mobile app allows family members to create searchable digital cubbies that map to where real items are in a household.
- **Kubmo** – Emma Lawler, Kinsey

**Campos sets fundraising goal for DigitalCurrents**

Campos EPC, a Denver-based oil and gas pipeline company, has issued a challenge to industry partners and friends to join the company in supporting the ATLAS Digital Currents program.

DigitalCurrents is a three-week technology-intensive summer workshop designed to provide hands-on computer science and engineering experiences to female and minority high school students.

Campos EPC has set a fundraising goal of $40,000 to sponsor 20 students in this summer’s workshop and to help build a diverse science, technology, engineering and math (STEM) pipeline in the metropolitan area.

Marco Campos, the founder and managing principal of Campos and an alumnus of the University of Colorado College of Engineering and Applied Science, sees the challenge as an investment in the future.

“Our business is not only about oil and gas pipelines. It is about building a future by investing in our communities and our kids,” Campos said.

DigitalCurrents is an outreach program of the ATLAS Institute and is offered in partnership with the National Center for Women and Information Technology. For more information about the program or to support Digital Currents, visit http://atlas.colorado.edu/digital-currents or contact Kathleen Archuleta, ATLAS director of external relations, at 303-492-8964.
Application Developers fund fellowship

ATLAS Ph.D. student Saleh appointed fellow

The Application Developers Alliance has established the Alliance Research Fellowship at ATLAS, and Ph.D. student Sid Saleh has been appointed the inaugural Application Developers Alliance Research Fellow.

The goal of the fellowship is to further understanding of the dynamics at play in the app development ecosystem.

“The Alliance is thrilled to partner with the ATLAS Institute to provide first-of-its-kind insight into the developer community and innovation in the apps industry,” Jon Potter, president of the Application Developers Alliance, said in a May 1 press release. “This allows us to tailor our programs and advocacy efforts to meet the needs of developers. Furthermore, our groundbreaking research will give policymakers insight into the developer community. Our scholarship incorporates real-world data and practical challenges. We expect the research the Alliance Fellow conducts will provide unique insight into an industry that has such an impact on global digital society.”

The Application Developers Alliance is an industry association dedicated to meeting the unique needs of application developers as creators, innovators, and entrepreneurs. Alliance members include more than 20,000 individual application developers and more than 100 companies, investors, and stakeholders in the apps ecosystem.

INAGURAL FELLOW: Sid Saleh has launched two research inquiries, one a poll of application developers, the other involving issues in the patent system.

Vickie Stubbs named recipient of annual ATLAS award

Vickie Stubbs, who is the ATLAS Ph.D. program adviser, assistant to the director and assistant building proctor, is the recipient of the 2013 ATLAS award.

This annual recognition is given “to the person who shoulders a heavy burden for ATLAS.”

Stubbs was nominated for the award for working “tirelessly to keep things running smoothly at ATLAS. She is always cheerful and willing to help. She has done an excellent job of managing our Ph.D. students – whether that means arranging airfare in conflict-ridden international contexts, or helping them navigate the strange university bureaucracy. Vickie is a friend to everyone, and an invaluable member of the ATLAS team.”

A native of Georgia and mother of three, Stubbs came to Colorado to study Japanese, German and political science at CU. She has a love for languages and triathlons.

She previously worked at CU as events coordinator in the BOLD Center, which is a K-12 math and science outreach program that also supports under-represented populations in the CU College of Engineering.

Kim Kalahar winner of ATLAS Titan of the Quarter award

Kim Kalahar, who is the program manager for the Academic Alliance (AA) and Extension Services (ES) for the National Center for Women and Information Technology, has been named the ATLAS Titan of the Quarter.

The award is given in recognition of outstanding efforts on behalf of ATLAS.

Kalahar was nominated for the award because of her “efforts working with events and vendors has saved us significant funds this past quarter.”

In addition, “she has been managing a heard of cats with her ES and AA programs and has kept them on track.”

Kalahar has been with NCWIT and ATLAS since 2007. Before joining NCWIT, Kim analyzed primary and secondary product research for several technology firms.

She enjoys jet skiing, watching Redwings hockey and spending time with her husband, Dave, who has been the curriculum adviser for the ATLAS Technology, Arts and Media (TAM) program since 2004, and with her two sons.
Student capstone projects now online

Go to: http://bit.ly/dc1aMM

The Alliance for Technology, Learning and Society (ATLAS) at the University of Colorado 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: