



# 2010 CLASS OF COMPUTING INNOVATION FELLOWS ANNOUNCED; PROGRAM, IN ITS SECOND YEAR, SEEKS TO RETAIN RECENT PHDS IN COMPUTING RESEARCH

WASHINGTON, DC, Jan. 14, 2011

The Computing Community Consortium (CCC) – a standing committee of the Computing Research Association (CRA) – today announced the 2010 class of Computing Innovation Fellows (CIFellows; <http://cifellows.org>). These 47 recent Ph.D. graduates have been competitively awarded one- to two-year postdoctoral positions at U.S. academic institutions and industrial organizations with basic computing research and teaching programs. Made possible by a \$15 million National Science Foundation (NSF) grant to the CRA – the second such grant in as many years – the 2010 CIFellowships are a continuation of an effort begun in 2009 to forestall a permanent loss of research talent likely to occur as a consequence of the financial crisis.

The new cohort of CIFellows is comprised of 47 individuals from 34 different Ph.D.-granting colleges and universities within the U.S., and collectively the CIFellows are assigned to mentors at 36 unique host organizations. They were selected from a pool of 218 applicants, spanning 78 different Ph.D.-granting colleges and universities and 105 possible host organizations. Like the 2009 CIFellows that came before them, the 2010 CIFellows will have uniquely independent research experiences that will help them sharpen their skills and enhance their credentials over the next one to two years.

To ensure broad participation and to build bridges between diverse institutions via the CIFellows, no more than two awardees earned their Ph.D.s from the same university, and no more than two awardees were assigned to the same host organization. Diversity of other forms – including research areas and individuals, etc. – were also encouraged. About 36 percent of the 2010 CIFellows are women.

The awarding of a second cohort of CIFellows follows overwhelmingly positive and beneficial experiences for the 2009 CIFellows and their mentors. Of the 60 CIFellows who started in the fall of 2009, 18 have now found other opportunities – including tenure-track faculty positions as well as permanent jobs at industrial research labs – and are not continuing in the Project for a second year. (All the rest are continuing in the CIFellows Project following successful mid-year evaluations.) For the 18 with other opportunities, the postdoctoral experiences were clearly beneficial, markedly enhancing their skills, credentials, and already stellar resumes. For example, one CIFellow demonstrated his capabilities through the development of a novel algorithm later featured in The Los Angeles Times (<http://articles.latimes.com/2010/apr/02/business/la-fi-ct-twitter3-2010apr03>); the algorithm uses Twitter to gauge real-time interest in movies and accurately predict how they will perform at the box office on opening weekend. In another case, the chair of a faculty search committee wrote, "As the hiring officer for this [tenure-track] position, I can attest that [the CIFellow's] postdoctoral experience ... enhanced [the candidate's] attractiveness to us." In three cases, the CIFellows were offered positions by their host organizations.

As one CIFellow wrote on a recent evaluation, "I view my [CIFellowship] as a bridge between graduate school and an academic career," wrote one CIFellow mid-way through his first year in the program. "With respect to this, I believe my experience so far has been extremely successful. I started working on several exciting projects... I have already submitted three papers to conferences and workshops... and perhaps most importantly, I met and began collaborating with top researchers in my area."

Like the inaugural class, the 2010 CIFellows were selected through an intensive process that considered applicants' research backgrounds and proposed research projects. A Selection Committee reviewed and evaluated each application and recommended a slate of finalists to a Steering Committee. The latter – comprising co-principal investigators (PIs) of the two NSF grants – provided administrative, financial, and technical oversight, and was ultimately responsible for all award decisions. The PI of the 2010 NSF grant, **Greg Andrews** (University of Arizona), chaired both committees.

Selection Committee members were:

Gregory Abowd, Georgia Institute of Technology  
 Al Aho, Columbia University  
 Greg Andrews, University of Arizona (chair)  
 David Bader, Georgia Institute of Technology  
 Martin Berzins, University of Utah  
 Erik Demaine, Massachusetts Institute of Technology  
 Bill Feiereisen, Intel Corporation  
 Jim Foley, Georgia Institute of Technology  
 Stephanie Forrest, University of New Mexico  
 Chad Jenkins, Brown University  
 M. Frans Kaashoek, Massachusetts Institute of Technology (co-chair)  
 Henry Kautz, University of Rochester  
 Hank Korth, Lehigh University  
 Jim Kurose, University of Massachusetts at Amherst  
 James Larus, Microsoft Research  
 Rob Miller, Massachusetts Institute of Technology  
 Hector Munoz-Avila, Lehigh University  
 Robin Murphy, Texas A&M University  
 Timothy Pinkston, University of Southern California  
 Sumeet Sandhu, Intel Research  
 Matthew Taylor, Lafayette College  
 Valerie Taylor, Texas A&M University  
 Josep Torrellas, University of Illinois at Urbana-Champaign  
 Jim Waldo, VMware

Steering Committee members were:

Greg Andrews, University of Arizona (chair)  
 Andrew Bernat, Computing Research Association  
 Susan Graham, University of California at Berkeley  
 Anita Jones, University of Virginia  
 M. Frans Kaashoek, Massachusetts Institute of Technology  
 Ed Lazowska, University of Washington  
 Ran Libeskind-Hadas, Harvey Mudd College  
 Bobby Schnabel, Indiana University  
 Bob Sproull, Oracle

The 2010 class of CIFellows and their mentors includes:

CIFellow	Ph.D.-granting university	Research area	Mentor	Host organization
Jae-wook Ahn	University of Pittsburgh	Information systems/information science	Ben Shneiderman	University of Maryland-College Park
Alvin AuYoung	University of	Networks/operating systems	Niraj Tolia	HP Labs

	California-San Diego			
Aruna Balasubramanian	University of Massachusetts-Amherst	Mobile/ubiquitous/embedded computing	David Wetherall	University of Washington
Robert Bocchino	University of Illinois-Urbana-Champaign	Programming languages/compilers	Jonathan Aldrich	Carnegie Mellon University
Lillian Chang	Carnegie Mellon University	AI/machine learning/robotics/vision	Joshua Smith	Intel Corp.
Yanhua Chen	Wayne State University	Scientific/medical informatics	Peter Song	University of Michigan
Marc Chiarini	Tufts University	Networks/operating systems	Margo Seltzer	Harvard University
David Choffnes	Northwestern University	Networks/operating systems	Tom Anderson	University of Washington
Tamara Clegg	Georgia Institute of Technology	CS education/educational technology	Allison Druin	University of Maryland-College Park
Jyotirmoy Deshmukh	University of Texas-Austin	Software engineering	Rajeev Alur	University of Pennsylvania
Xiaoning Ding	Ohio State University-Main Campus	Networks/operating systems	Phillip Gibbons	Intel Corp.
David Doty	Iowa State University	Theory/algorithms	Erik Winfree	California Institute of Technology
Jenny Finkel	Stanford University	AI/machine learning/robotics/vision	Michael Collins	Massachusetts Institute of Technology
Samuel Gordon	University of Maryland-College Park	Theoretical Cryptography and Security	Tal Malkin	Columbia University
Elena Grigorescu	Massachusetts Institute of Technology	Theory/algorithms	Chris Peikert	Georgia Institute of Technology

Haryadi Gunawi	University of Wisconsin-Madison	Networks/operating systems	Joseph Hellerstein	University of California-Berkeley
David Harmon	Columbia University	Graphics/visualization	Denis Zorin	New York University
Timothy Havens	University of Missouri-Columbia	Databases/information retrieval/data mining	Anil Jain	Michigan State University
Michael Hay	University of Massachusetts-Amherst	Databases/information retrieval/data mining	Johannes Gehrke	Cornell University
Houman Homayoun	University of California-Irvine	Hardware/architecture	Dean Tullsen	University of California-San Diego
Shaili Jain	Harvard University	Social computing/social informatics	Joan Feigenbaum	Yale University
Saket Joshi	Tufts University	AI/machine learning/robotics/vision	Prasad Tadepalli	Oregon State University
Thomas Kiehl	Rensselaer Polytechnic Institute	Other -- systems biology, evolutionary computing	Matthew Hynd	University of Albany
Samantha Kleinberg	New York University	Scientific/medical informatics	George Hripcsak	Columbia University
J. Zico Kolter	Stanford University	AI/machine learning/robotics/vision	Russ Tedrake	Massachusetts Institute of Technology
Lukas Kroc	Cornell University	AI/machine learning/robotics/vision	Allon Percus	Claremont Graduate University
Vijay Kumar	Ohio State University-Main Campus	Numerical computing/HPC/data-intensive scalable computing	Jay Wylie	HP Labs
Homin Lee	Columbia University	Theory/algorithms	Adam Klivans	University of Texas-Austin
Yuliya Lierler	University of Texas-Austin	AI/machine learning/robotics/vision	Miroslaw Truszczynski	University of Kentucky
Xiaojuan Ma	Princeton University	HCI/CSCW	Jodi Forlizzi	Carnegie Mellon

				University
Amon Millner	Massachusetts Institute of Technology	CS education/educational technology	Lynn Stein	Franklin W. Olin College of Engineering
Arifa Nisar	Northwestern University	Numerical computing/HPC/data-intensive scalable computing	Ethan Miller	University of California-Santa Cruz
Amit Pande	Iowa State University	Mobile/ubiquitous/embedded computing	Prasant Mohapatra	University of California-Davis
Sharoda Paul	Pennsylvania State University	HCI/CSCW	Ed Chi	Palo Alto Research Center
Brian Price	Brigham Young University	AI/machine learning/robotics/vision	Scott Cohen	Adobe Systems, Inc.
Dustin Reishus	University of Southern California	Other - self-assembly/self-organization	Nikolaus Correll	University of Colorado-Boulder
Thomas Schmid	University of California-Los Angeles	Mobile/ubiquitous/embedded computing	Prabal Dutta	University of Michigan
Ricky Sethi	University of California-Riverside	AI/machine learning/robotics/vision	Jenn Vaughan	University of California-Los Angeles
Saurabh Srivastava	University of Maryland-College Park	Programming languages/compilers	Rastislav Bodik	University of California-Berkeley
Muthuramakrishnan Venkitasubramaniam	Cornell University	Information assurance/security/privacy/cryptography	Yevgeniy Dodis	New York University
Erin Walker	Carnegie Mellon University	CS education/educational technology	Winslow Burleson	Arizona State University
Susan Wyche	Georgia Institute of Technology	Hardware/architecture	Steve Harrison	Virginia Polytechnic Institute
Yinglong Xia	University of Southern California	Numerical computing/HPC/data-intensive scalable computing	Anshul Gupta	IBM Research

Yang Xiang	Kent State University	Scientific/medical informatics	Kun Huang	Ohio State University
Cem Yuksel	Texas A&M University	Graphics/visualization	Doug James	Cornell University
Ting Zhu	University of Minnesota-Twin Cities	Networks/operating systems	Don Towsley	University of Massachusetts-Amherst
Caroline Ziemkiewicz	University of North Carolina-Charlotte	Graphics/visualization	David Laidlaw	Brown University

And the 2009 CIFellows who are continuing for a second year include:

<b>CIFellow</b>	<b>PhD Institution</b>	<b>Field of Research</b>	<b>Mentor</b>	<b>Host Institution</b>
Zlatan Aksamija	University of Illinois at Urbana-Champaign	Quantum Computing, Synthetic Biology, Computational Neuroscience, etc.	Irena Knezevic	University of Wisconsin-Madison
Cindy Bethel	University of South Florida	AI / Machine Learning / Robotics / Vision	Brian Scassellati	Yale
Carleton Bosley	New York University	Information Assurance / Security / Privacy / Cryptography	Antonio Nicolosi	Stevens Institute of Technology
Yuriy Brun	University of Southern California	Software Engineering	David Notkin	University of Washington
Nicholas Diakopoulos	Georgia Tech	HCI/CSCW	Mor Naaman	Rutgers University
Jeremy Fineman	MIT	Theory / Algorithms	Guy Blelloch	Carnegie Mellon University
Ronald Garcia	Indiana University-Bloomington	Programming Languages/Compilers	Frank Pfenning	Carnegie Mellon University
Ragib Hasan	University of Illinois at Urbana-Champaign	Information Assurance / Security / Privacy / Cryptography	Randal Burns	Johns Hopkins University
Daniel Howe	New York University	Quantum Computing, Synthetic Biology,	Andy van Dam	Brown University

		Computational Neuroscience, etc.		
Yuho Jin	Texas A&M	Hardware / Architecture	Timothy Pinkston	University of Southern California
Jeffrey Johns	University of Massachusetts-Amherst	AI / Machine Learning / Robotics / Vision	Ronald Parr	Duke University
Yong Kil	UC Davis	Graphics/Visualization	Marshall Bern	Xerox PARC
Dara Kusic	Drexel	Networks/Operating Systems	Daniel Mosse	University of Pittsburgh
Edgar Lobaton	University of California-Berkeley	AI / Machine Learning / Robotics / Vision	Ron Alterovitz	University of North Carolina
Cristian Lumezanu	University of Maryland-College Park	Networks/Operating Systems	Nick Feamster	Georgia Tech
Niti Madan	University of Utah	Hardware / Architecture	Pradip Bose	IBM
Victoria Manfredi	University of Massachusetts-Amherst	Networks/Operating Systems	Mark Crovella	Boston University
Damon McCoy	University of Colorado at Boulder	Information Assurance / Security / Privacy / Cryptography	Stefan Savage	University of California-San Diego
Andrew McPherson	University of Pennsylvania	HCI/CSCW	Youngmoo Kim	Drexel
Miriah Meyer	University of Utah	Graphics/Visualization	Hanspeter Pfister	Harvard
Lilyana Mihalkova	University of Texas at Austin	AI / Machine Learning / Robotics / Vision	Lise Getoor	University of Maryland
Antonina Mitrofanova	New York University	Scientific/Medical Informatics <sup>2</sup>	Andrea Califano	Columbia University
Deidra Morrison	Northwestern University	Social Computing / Social Informatics	Juan Gilbert	Clemson University
Ifeoma	SUNY Buffalo	AI / Machine Learning /	Christopher Brown	University of

Nwogu		Robotics / Vision		Rochester
Iris Oved	Rutgers University-New Brunswick	AI / Machine Learning / Robotics / Vision	Paul Cohen	University of Arizona
Jeff Phillips	Duke University	Theory / Algorithms	Suresh Venkatasubramanian	University of Utah
Sally Pias	New Mexico State University	Scientific/Medical Informatics <sup>2</sup>	Carlos Simmerling	SUNY Stony Brook
Anna Pyayt	University of Washington-Seattle Campus	Hardware / Architecture	Olav Solgaard	Stanford University
Leena Razzaq	Worcester Polytechnic Institute	Computer Science Education / Educational Technology	Beverly Woolf	University of Massachusetts-Amherst
Guy Rothblum	MIT	Theory / Algorithms	Boaz Barak	Princeton University
Sushmita Roy	University of New Mexico	Scientific/Medical Informatics <sup>2</sup>	Aviv Regev	Broad Institute
Linda Sellie	University of Chicago	AI / Machine Learning / Robotics / Vision	Lisa Hellerstein	New York University
Stelios Sidiroglou	Columbia University	Information Assurance / Security / Privacy / Cryptography	Martin Rinard	MIT
David Soloveichik	California Institute of Technology	Quantum Computing, Synthetic Biology, Computational Neuroscience, etc.	Georg Seelig	University of Washington
Veselin Stoyanov	Cornell University	AI / Machine Learning / Robotics / Vision	Jason Eisner	Johns Hopkins University
Julia Stoyanovich	Columbia University	Databases / Information Retrieval / Data Mining	Susan Davidson	University of Pennsylvania
Cui Tao	Brigham Young University	Scientific/Medical Informatics <sup>2</sup>	Christopher Chute	Mayo Clinic
Lydia Tapia	Texas A&M	Scientific/Medical Informatics <sup>2</sup>	Ron Elber	University of Texas at Austin
David Van	Brandeis	Programming	Matthias Felleisen	Northeastern



Horn	University	Languages/Compilers		University
Virginia Vassilevska Williams	Carnegie Mellon University	Theory / Algorithms	Satish Rao	University of California-Berkeley
Stephen Voids	Georgia Tech	HCI/CSCW	Gloria Mark	UC Irvine
Weijun Xiao	University of Rhode Island	Hardware / Architecture	David Lilja	University of Minnesota
Liangjun Zhang	University of North Carolina at Chapel Hill	Quantum Computing, Synthetic Biology, Computational Neuroscience, etc.	Jean-Claude Latombe	Stanford University

**About the CCC:** The CCC (<http://cra.org/ccc>) was established in 2007 under a cooperative agreement between the CRA and the NSF. A standing committee of the CRA, the CCC seeks to mobilize the computing research community to debate long-range challenges and build consensus around specific research visions. The CCC specifically pursues the next big computing ideas that will define the future of the field, attract the very best talent, and catalyze research investment and public support in the long term.

**For more information:** Contact Ann Drobni, Director of the Computing Community Consortium & Computing Innovation Fellows Project: [adrobni \[at\] cra.org](mailto:adrobni@cra.org); 202-266-2936.