

Timothy Brick



Ph.D. – University of Virginia

Postdoctoral Research Fellow, Center for Lifespan Psychology, Max Planck Institute for Human Development

<https://www.mpib-berlin.mpg.de/en/staff/timothy-brick>

- Computer Vision Techniques in Psychology
- Machine Learning and Data Mining
- Structural Equation Modeling
- Dynamical Models of Psychological Processes
- Multilevel Modeling
- With Human Development and Family Studies
(Asst. Professor)

Guido Cervone



Ph.D. – George Mason University

Associate Professor, Department of Geography and
Geoinformation Science

George Mason University

<http://cervone.gmu.edu/>

- Remote sensing and geoinformatics
- Natural hazards monitoring, analysis and forecasting
- Mining social networks in the aftermath of major catastrophic natural disasters
 - Transportation infrastructure failures
 - Damage assessment
- Geography + ICS co-hire (Assoc. Professor)

Michael DeGiorgio



Ph.D. – University of Michigan

NSF Postdoctoral Research Fellow, Department of Integrative Biology, University of California, Berkeley

<http://cteg.berkeley.edu/~degiorgio>

- Using statistical population genetics and phylogenetics to understand within- and between-species evolutionary relationships
- Development and application of statistical methods for identifying signals of natural selection in genomewide data
- Bridges ECOS & Liberal Arts
- Biology + ICS co-hire (Asst. Professor)

Eric Ford



Ph.D. – Princeton University

Associate Professor, Department of Astronomy
University of Florida, Gainesville

<http://www.astro.ufl.edu/~eford/>

- Finding habitable planets through dynamical simulations and signal extraction from “Big Data”
- Awarded the American Astronomical Society Helen B. Warner prize in 2012 “for his theoretical and computational research in the field of extrasolar planets, including ground-breaking work on the dynamical evolution of planetary systems and planet formation.”
- Astronomy + ICS co-hire (Professor)

Steven Greybush



Ph.D. – University of Maryland
Research Associate, Atmospheric & Oceanic Science
University of Maryland

<http://www.atmos.umd.edu/~greybush/>

- Numerical weather prediction
- Weather and climate of Mars
 - Leads the development of the first Martian atmosphere model
- Atmospheric modeling
- Penn State UG
- Meteorology + ICS co-hire (Asst. Professor)

Chad Hanna



Ph.D. – Louisiana State University

Post-doctoral Fellow

Perimeter Institute for Theoretical Physics, Waterloo,
Ontario, Canada

<http://www.perimeterinstitute.ca/people/chad-hanna>

“Gravitational waves are predicted by Einstein's theory of
General Relativity, though none have been directly
detected”

- Near “real-time” detection of gravitational radiation
 - Invaluable for multi-messenger astronomy
- Gravitational wave detection
 - Opens up a new branch of astrophysics
- Physics + ICS co-hire (Asst. Professor)

John Harlim



Ph.D. – University of Maryland

Assistant Professor, Department of Mathematics

North Carolina State University

<http://www4.ncsu.edu/~jharlim/>

- Large simulations of the ocean-atmosphere interactions
 - Climate and weather predictability
- Designing physics constrained nonlinear regression models for time series data
- NSF CAREER award winner
- Bridges ECOS & EMS
- Math + Meteorology + ICS co-hire (Assoc. Professor)

Vasant Honavar



Ph.D. – University of Wisconsin - Madison
Professor, Department of Computer Science, Iowa
State University

<http://www.cs.iastate.edu/~honavar/>

- Machine Learning, Data Mining, and Big Data Analytics
- Bioinformatics and Computational Molecular and Systems Biology
- Knowledge Representation and Semantic Web
- Health Informatics, Social Network Informatics
- Bridges IST, ECOS, ENG & HHD
- With Information Sciences & Technology (Frymoyer Chair Professor)

Reuben Kraft



Ph.D. – The Johns Hopkins University
Post-doctoral Fellow, Applied Physics Laboratory
The Johns Hopkins University

- Computational biomechanics and neuroscience
- Mapping the brain --- the Connectome
- Mapping brain deformation from extreme trauma
- 2012 Presidential Early Career Award for Scientists and Engineers (PECASE)
- Bridges ENG, ECOS & HHD
- Mechanical Eng. + ICS co-hire (Asst. Professor)

Xiaofeng Liu



Ph.D. – University of Illinois, Urbana-Champaign
Assistant Professor, Department of Civil &
Environmental Engineering, University of Texas at
San Antonio

<http://engineering.utsa.edu/~xiaofengliu/>

- Computational environmental hydraulics
 - Hydrology, sediment transport, and water resource management
- Civil & Environmental Engineering + ICS co-hire (Asst. Professor)

Edward O'Brien



Ph.D. – University of Maryland

NSF Post-doctoral Fellow, Department of Chemistry,
University of Cambridge, UK

- Ribosome-associated protein folding, macromolecular self-assembly and chaperone interactions in living cells
- Studying these systems from simulations at the molecular level up to the systems level in terms of proteome-wide behavior
- Bridges Chemistry & BMB
- Chemistry+ ICS co-hire (Asst. Professor)

Zita Oravecz



Ph.D. – University of Leuven (Belgium)

Post-doctoral Researcher, Cognitive Sciences, University of California, Irvine

<http://www.cogsci.uci.edu/~zoravecz/bayes/BOUM.php>

- Dynamical intensive longitudinal data modeling
- Linear mixed models
- Cognitive latent variable modeling
- Psychometrics
- With Human Development and Family Studies
(Asst. Professor)

Ben Shaby



Ph.D. – Cornell University

Postdoctoral fellow, Department of
Statistics, University of California, Berkeley

<http://www.stat.berkeley.edu/~bshaby/>

- Monte Carlo methods for high dimensional spatial data
- Extensive applications to environmental studies
 - realistic models of spatial dependence between extreme events like heat waves or rain storms
- Bridges ECOS & EMS
- Statistics + ICS co-hire (Asst. Professor)

Martin Tingley



Ph.D. – Harvard University

Postdoctoral Research Associate, Department of Earth and Planetary Sciences Harvard University

<http://www.martintingley.com/>

- Statistical climatology
 - space–time modeling of climate data
 - models for time–uncertain climate observations
 - reconstruction of paleoclimate
- Bridges EMS & ECOS
- Meteorology + Statistics + ICS co-hire (Asst. Professor)

Christelle Wauthier



Ph.D. – University of Liege, Belgium

Carnegie Postdoctoral Fellow, Department of
Terrestrial Magnetism, Carnegie Institution of
Washington

<http://www.dtm.ciw.edu/users/cwauthier>

- Study of natural hazards by means of remote-sensing and geophysical techniques
- Relevant for NSF EarthCube
- Bridges EMS & ENG
- Geosciences + ICS co-hire (Asst. Professor)

Minghui Zhu



Ph.D. – University of California, San Diego

Postdoctoral Associate, Laboratory for
Information and Decision Systems,
Massachusetts Institute of Technology

<http://web.mit.edu/mhzhu/www>

- Control, Optimization, Game Theory, Robotics
- Design, analysis and control of multi-agent networks with applications in multi-vehicle networks, transportation systems and the power grid
- Builds distributed control capability around Navy Yard Micro-grid & Smart Buildings HUB facilities
- Electrical Engineering + ICS co-hire (Asst. Professor)