RESEARCH STATEMENT

I work to understand how to improve the role of technology with respect to personal and societal issues. I design, build, and implement systems that are intuitive to human needs in terms of the safety and services they provide. I am currently pursuing research opportunities in Human-Computer Interaction that take advantage of machine learning, image processing, and interaction design techniques. I am interested in making, sustainability, wearables, education technology, robotics, and games.

EDUCATION

University of Maryland, College Park
Present Doctoral Candidate, Department of Computer Science
Advisor: Dr. Jon E. Froehlich
Area: Human-Computer Interaction & Sustainable HCI

University at Albany, State University of New York
2010 Master of Business Administration
Area: Information Technology Management
Thesis: The Impact of Collective Efficacy on Organizational Behaviors

2008 Master of Science, Computer Science and Applied Mathematics
Area: Software Architecture & Project Management
Qualifying Project: The Design of a Content & Business Management System for Collegiate Sports

2007 Bachelor of Science, Computer Science and Applied Mathematics

HONORS, AWARDS, & PROFESSIONAL DEVELOPMENT

2017 Excellent Reviewer. ACM SIGCHI, CHI2017
2017 All S.T.A.R. Fellow. The Graduate School, University of Maryland
2017 Future Faculty Fellow. The Clark School, University of Maryland
2016 Jacob K. Goldhaber Travel Award. The Graduate School, University of Maryland
2015 Outstanding Graduate Assistant Award, The Graduate School, University of Maryland
2015 Level 1 Thermographer Certification, Infrared Training Center
2014 HCIL Conference Travel Award, Human-Computer Interaction Lab, University of Maryland
2013 Distinguished Teaching Assistant Award, Center for Teaching Excellence, University of Maryland
2013 John D. Gannon Travel Award, Department of Computer Science, University of Maryland
2012 IGDA Scholar Award, International Game Developers Association
2011 Graduate Participant, Revolutionary Aerospace Systems Concept Academic Linkage, National Institute of Aerospace
2010 Certified Scrum Master, Scrum Alliance
2010 Global Business Strategic Management Team Champion Award, The Business School, University at Albany
2003 EntrePrep, Lally School for Entrepreneurial Leadership, Rensselaer Polytechnic Institute

RESEARCH & WORK EXPERIENCE

Graduate Research Assistant, UMIACS, University of Maryland, College Park, MD, 2014- Present
Makeability Lab, Human-Computer Interaction Lab, Department of Computer Science. Research Advisor: Dr. Jon E. Froehlich

User Experience Research Intern, Microsoft Research, Bellevue, WA, 2015
Research Advisors: Tapas Kanungo & Susan Dumais

Teaching Assistant, Department of Computer Science, University of Maryland, College Park, MD, 2012 – 2016
Introduction to Human Computer Interaction, Introduction to Image Processing, and Introduction to Computer Systems

University Career Center & the President’s Promise, University of Maryland, College Park, MD, 2010 – 2012
Web Services Developer

Intriguing Design Studios Incorporated, Albany, NY, 2007 – Present
President (Project Manager/Developer)

Graduate Assistant (Web Applications Developer)
RESEARCH & WORK EXPERIENCE (Continued)

Information Technology Intern (Technician/Programmer)

Interactive Media Center, University Library, University at Albany, State University of New York, Albany, NY, 2006 – 2007
Student Consultant (Technician/Consultant)

The Office of the Chief Information Officer, Office of the State Comptroller, Albany, NY, 2006
Project Management Intern

Information Technology Intern

CONFERENCE PUBLICATIONS


JOURNAL PUBLICATIONS


ADJUNCT PUBLICATIONS


WORKSHOP PAPERS


CONFERENCE PRESENTATIONS


POSTER PRESENTATIONS


“Simplifying overviews of temporal event sequences.” CHI 2016, San Jose, California, USA, May 7 - 17, 2016.


INVITED TALKS


“Exploring non-professional smartphone-based thermographic energy auditing.” 32nd Annual HCIL Symposium, College Park, Maryland, USA, May 26, 2016.


“Game jams, SCRUM, and the development of independent video games.” 1st Annual UMD Video Game Showcase, College Park, Maryland, USA, April 14, 2013.

GRANTS AND AWARDS

2014  Application for Engineering Funds to Support Automated Thermography and Building Sustainability
University of Maryland, Office of Sustainability, $11,500.
Led grant proposal with co-author Dr. Jon E. Froehlich.

TEACHING

University of Maryland, College Park

2015  Volunteer Instructor, CMSC838L: Advanced Topics in Programming Languages; HCI Reading Seminar

2013 - 2016  Teaching Assistant, CMSC434: Introduction to Human-Computer Interaction

2012  Teaching Assistant, CMSC426: Introduction to Image Processing

2012  Teaching Assistant, CMSC216: Introduction to Computer Systems
MENTORING

Present    Simran Chawla, Undergraduate Intern
Present    Jonah Chazam, High School & Undergraduate Intern
2017      Sapna Bagalkotkar, High School Intern
2017      Samuel Kushnir, High School Intern
2017      Matt Brady, Undergraduate Intern
2017      Anthony Castrio, Undergraduate Intern
2016      Julia Zheng, Undergraduate Intern
2016      Luka Zhupa, Undergraduate Intern
2014, 2016 Jamie Gilkeson, High School & Undergraduate Intern
2015 - 2016 Erica Brown, Undergraduate Intern

PROFESSIONAL ACTIVITIES/SERVICE

Present    Graduate Admissions Committee
Present    Student Member, Association for Computing Machinery (ACM) and SIGCHI
Present    Student Member, International Game Developers Association
Present    Project Manager & Contributor, Independent Video Game Project(s)
Present    HCIL Hackerspace Student Coordinator
2018      Reviewer, Graphics Interface
2018      Reviewer, Designing Interactive Systems
2016 - 2017 Department Council, Department of Computer Science, University of Maryland
2017      Reviewer, Social Science Computer Review (SSCORE)
2017      Reviewer, Proceeding of the ACM on Interactive, Mobile, Wearable, and Ubiquitous Technologies (IMWUT)
2016, 2017 Reviewer, Journal of Medical Internet Research (JMIR)
2016      Graduate Student Ambassador, Department of Computer Science, University of Maryland
2016 - 2017 Reviewer, Computer-Human Interaction in Play (CHI-PLAY)
2016      Student Volunteer, Human Factors in Computer Systems Conference (CHI)
2015 – 2016 Education Committee, Department of Computer Science, University of Maryland
2014 – 2016 HCIL-Play Coordinator
2014 – 2016 Reviewer, Pervasive and Ubiquitous Computing
2012 – 2013 Vice President, University of Maryland Student Chapter of the Association for Computing Machinery
2012 – 2013 Guest Columnist, BaltimoreGamer
2011      Volunteer, University of Maryland STEM Expo & University of Maryland Day

REFERENCES

Allison Druin, Ph.D.  Ben Shneiderman, Ph.D.
Associate Provost  Professor
Research and Strategic Partnerships  Department of Computer Science
Pratt Institute  University of Maryland
200 Willoughby Avenue  A.V. Williams Building 3177
Brooklyn, NY 11205  College Park, MD 20742
adruin@pratt.edu  ben@cs.umd.edu

Tapas Kanungo, Ph.D.  Jon E. Froehlich, Ph.D.
Principal Applied Scientist  Assistant Professor
Microsoft Bing R&D  Paul G. Allen School of Computer Science & Engineering
Microsoft Corporation  University of Washington
One Microsoft Way  185 E Stevens Way NE, Box 352350
Redmond, WA 98052  Seattle, WA 98195
tkanungo@microsoft.com  jonf@cs.washington.edu

Additional references available upon request.