Yasha S. Iravantchi

Human-Computer Interaction Institute
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Pittsburgh, PA 15213

https://yasha.xyz
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Research Interests

Human-Computer Interaction (HCI), On-Body Sensing, Interaction Techniques, Wearable Devices

Education

Carnegie Mellon University, Pittsburgh, PA — *Aug 2017 to Present*
Ph.D. Student, Human-Computer Interaction

Harvard College, Cambridge, MA — *May 2014*
S.B., Engineering Sciences:
Electrical Engineering & Biomedical Engineering

Professional Experience

Design Specialist in Electrical Engineering — *Jun 2014 to Jun 2017*
Active Learning Labs, Harvard University SEAS
Cambridge, MA

Product Design and Engineering Intern — *Summers 2009-2012*
Design Catapult, Inc.
Fountain Valley, CA

Publications

5. **Yasha Iravantchi**, Yang Zhang, Evi Bernitsas, Mayank Goel, Chris Harrison. Interferi: Gesture Sensing using On-Body Acoustic Interferometry. *In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*, 2019 - ***Best Paper Honorable Mention Award***

4. **Yasha Iravantchi**, Mayank Goel, Chris Harrison. BeamBand: Hand Gesture Sensing with Ultrasonic Beamforming. *In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*, 2019

3. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos. SwellFit: Developing a Wearable Sensor for Monitoring Peripheral Edema. *In Proceedings of the 52nd Hawaii International Conference on System Sciences (HICSS-52)*, 2019

2. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos, Barbara Grosz. SwellFit: a Wearable Sensor for Patients with Congestive Heart Failure. In *Proceedings of the Workshop on Interactive Systems in Healthcare (WISH) 2016*, 2016.

1. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos, Barbara Grosz. Exploring Opportunities for Social Infrastructure in Congestive Heart Failure Management. In *Proceedings of the CSCW 2015 workshop on Moving Beyond e-Health and the Quantified Self*, 2015

Invited Talks

2. *"Labs in the Wild": Teaching Signal Processing Using Wearables and Jupiter Notebooks in the Cloud*. SciPy Conference 2016, Austin, TX

1. *Wearable Signal Processing Using Docker Notebook Containers on AWS. JupyterDays Boston 2016*, Cambridge, MA

Teaching Experience

Teaching Fellow:
ES 155 Biological Signal Processing (Spring 2016, Fall 2016)
ES 50 Introduction to Electrical Engineering (Spring 2013, Spring 2014)
BE 110 Physiological Systems Analysis (Fall 2013)

Course Assistant:
ES 52 The Joy of Electronics - Part I (AY 14, 15, 16)
ES 96 Engineering Problem Solving and Design Project (AY 14, 15, 16)
ES 100 Engineering Design Projects (AY 14, 15, 16)
ES 151 Applied Electromagnetism (Spring 2016)

References

Krzysztof Z. Gajos
Professor
Intelligent Interactive Systems Group
Harvard University SEAS
e: kgajos@seas.harvard.edu

Community Service

Student Volunteer:
ACM CHI Conference on Human Factors in Computing, April 2018

Languages

Computer Languages:
C, MatLab, LaTeX, HTML, PHP, Java, JavaScript, Python

Human Languages:
English (Native), Persian (Native), Spanish (Previously Fluent)