SAEED ABDULLAH

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website http://saeedabdullah.com/

RESEARCH INTEREST

My work, on a broader scale, focuses on providing technology mediated care in the context of mental health. In this new model of care, the goal is to detect early warning signs and provide intervention even before the relapse happens — moving from reactive to preemptive care.

Towards that, I have designed, developed and deployed smartphone based sensing systems for Bipolar and Schizophrenic patients. I am also interested in enabling circadian stability in general population.

EDUCATION

2011 – **Cornell University, Ithaca, NY**

PhD Student

Information Science
Committee: Tanzeem Choudhury (Chair), Geri Gay and Deborah Estrin

2011 – 2014 **Cornell University, Ithaca, NY**

Master of Science

Information Science
GPA: 3.86 · Adviser: Tanzeem Choudhury

2009 – 2011 **University of Vermont, Burlington, VT**

Master of Science

Computer Science
GPA: 4.00 · Adviser: Xindong Wu
Worked on modeling information diffusion on Twitter using mathematical epidemiology theories.

2003 – 2007 **BUET, Dhaka**

Bachelor of Science

Bangladesh University of Engineering & Technology (BUET)
Computer Science & Engineering
GPA: 3.79 · Advisers: Dr Monirul Islam and Shohrab Hossain
Thesis Topic: Evolution of Neural Network using Genetic Algorithm

WORK EXPERIENCE

2012 – **Cornell University**

Graduate Researcher

Designing, developing and deploying smartphone based sensing systems in the context of mental health.

2011 – 2012 **Cornell University**

Graduate Teaching Assistant

Teaching and grading for *CS4300: Information Retrieval* and *CS/INFO 2300: Intermediate Design and Programming for the Web*. Guest lecture on special topics for *INFO 4120/6120: Ubiquitous Computing*.

2009 – 2011 **University of Vermont**

Graduate Teaching Assistant

Teaching and grading for *CS 201: Operating Systems*, *CS 32: Puzzles, Games & Algorithms*, *CS 222: Computer Architecture*, *CS224: Algorithm Design and Analysis*, *CS 195: Computer Science for Geo-spatial Technologies*, *CS 204: Database Systems*

2008 – 2009 AfriGIS Ltd, Dhaka, Bangladesh

Software Developer

Developing search engine with special focus on geographic relevance for subscribers of Vodacom, South Africa.

2008 Summer Google Summer of Code

Google Summer of Code

Worked on a Just-In-Time (JIT) compiler for Java to provide instruction selection and code emission for array manipulation bytecodes.

SERVICE

2011 – Cornell University

Student Representative

Faculty Hiring Committee (2013 – Present)
Computing Facilities Support (2011 – 2013)
Colloquium Organizer (2011 – 2012)

Reviewer

CHI (2014 – 2015)
UbiComp (2014 – 2015)
PervasiveHealth, 2015
IEEE Transactions on Knowledge and Data Engineering
Behavior Research Methods Journal

Organizer

Program Committee Member
5th International Conference on Digital Health, 2015

Workshop Organizer
Biological Rhythms and Technology, CHI, 2014

AWARDS

2013 Summer $100,000 Heritage Open mHealth Challenge

Heritage Open mHealth Challenge Winner

Our MoodRhythm project focusing on Bipolar patients won Heritage Open mHealth Challenge co-sponsored by Heritage Provider Network, Open mHealth, and the University of California, Los Angeles.

PRESENTATIONS

2014 Summer ISTC-PC

ISTC-PC

Intel Science and Technology Center for Pervasive Computing (ISTC-PC)
Presentation title: Towards Circadian Computing: "Early to Bed and Early to Rise" Makes Some of Us Unhealthy and Sleep Deprived

2014 Summer Human Computer Interaction Consortium

HCIC

Human Computer Interaction Consortium (HCIC)
Boaster title: Circadian computing: Towards bodyclock friendly technology

2014 Spring MIT & Cornell Hacking-Medicine Hackathon

Health Hackathon hosted by WebMD

Selected to participate in MIT & Cornell Health focused Hackathon hosted by WebMD. Worked on Smartphone app that supports individuals with Bipolar Disorder to establish daily routine

2012 Summer ISTC-PC

ISTC-PC Intel Science and Technology Center for Pervasive Computing (ISTC-PC)
Poster title: Towards Population Scale Activity Recognition: A Scalable Framework for Handling Data Diversity

PUBLICATIONS

2015 Saeed Abdullah, Elizabeth L. Murnane, Jean MR Costa, and Tanzeem Choudhury. Collective Smile: Measuring Societal Happiness from Geolocated Images. In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing, pp. 361-374. ACM, 2015.

Jaime Snyder, Mark Matthews, Jacqueline Chien, Pamara F. Chang, Emily Sun, Saeed Abdullah, and Geri Gay. MoodLight: Exploring Personal and Social Implications of Ambient Display of Biosensor Data. In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing, pp. 143-153. ACM, 2015.

2014 Saeed Abdullah, Mark Matthews, Elizabeth L. Murnane, Geri Gay, and Tanzeem Choudhury. Towards Circadian Computing: Early to Bed and Early to Rise Makes Some of Us Unhealthy and Sleep Deprived. The 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014).

Mark Matthews, Saeed Abdullah, Geri Gay, and Tanzeem Choudhury. Tracking Mental Well-Being: Balancing Rich Sensing and Patient Needs. Computer, 47.4(2014). IEEE Computer Society.

2013 Saeed Abdullah. Clockwise: Inferring Chronotype and Daily Patterns from Smartphone Use. Extended abstract presented in Doctoral School, UbiComp 2013.

Snyder, J., Matthew, M., Abdullah, S., Chien, J., Sun, E., Gay, G. Light, Color, Affect, and Stress. Annual Meeting of the Society for Social Studies of Science (4S), San Diego, CA, October 2013.

Frank. E, Matthews, M., Choudhury, T., Voida, S. & Abdullah, S. Developing a Smart Phone App to Monitor Mood, Social Rhythms, Sleep and Social Activity: Technology to Support Effective Management of Bipolar Disorder. Accepted Poster to American College of Neuropsychopharmacology.

Voida, S., Matthews, M., Abdullah, S., Chi, M., Green, M., Jang, W.J., Hu, D., Weinrich, J., Patil, P., Rabbi, M., Rahman, T., Gay, G., Frank, E. & Choudhury, T. MoodRhythm: Tracking and supporting daily rhythms. Interactive demonstration presented UbiComp, 2013.

2012 Saeed Abdullah, Nicholas Lane, and Tanzeem Choudhury. Towards Population Scale Activity Recognition: A Scalable Framework for Handling Data Diversity. Appears in the Proceedings of AAAI 2012.

2011 Saeed Abdullah and Xindong Wu. An epidemic model for news spreading on twitter. 23rd IEEE International Conference on Tools with Artificial Intelligence (ICTAI), 2011.

2009 Anupam Das and Saeed Abdullah. Evolving Multilayer Neural Networks using Permutation free Encoding Technique. In Proceedings of the 2009 International Conference on Artificial Intelligence (ICAI, 2009)

2008 Anupam Das, Md. Shohrab Hossain, Saeed Abdullah, and Rashed Ul Islam. Permutation Free Encoding Technique for Evolving Neural Networks. In Proceedings of the 5th international symposium on Neural Networks: Advances in Neural Networks (ISNN, 2008)