#### SAEED ABDULLAH

SAEED@PSU.EDU ● SAEEDABDULLAH.COM

#### 2017 - Assistant Professor

College of Information Sciences and Technology Penn State University

#### **EDUCATION**

### 2011 - 2017 PhD, Department of Information Science, Cornell University

Committee: Tanzeem Choudhury (chair), Geri Gay and Deborah Estrin Dissertation: Circadian Computing: Sensing and Stabilizing Biological Rhythms

#### 2011 - 2014 Master of Science, Department of Information Science, Cornell University

Advisor: Tanzeem Choudhury

#### 2009 - 2011 Master of Science, Computer Science, University of Vermont

Advisor: Xindong Wu

## 2003 – 2007 Bachelor of Science, Computer Science & Engineering, Bangladesh University of Engineering & Technology

Advisors: Dr Monirul Islam and Shohrab Hossain

Thesis: Evolution of Neural Network using Genetic Algorithm

#### **PUBLICATIONS**

**JOURNAL ARTICLES** 

# 2022 J10 Alexa as an Active Listener: How Backchanneling Can Elicit Self-Disclosure and Promote User Experience

Eugene Cho, Nasim Motalebi, S. Shyam Sundar, and SAEED ABDULLAH Proceedings of the ACM on Human-Computer Interaction (PACM HCI) In press

### 2021 J09 A Query Conundrum: The Mental Challenges of Using a Cognitive Assistant

Torsten Maier, SAEED ABDULLAH, Christopher McComb, and Jessica Menold SN Computer Science

DOI: 10.1007/s42979-021-00621-9

# JOS It Didn't Sound Good with My Cochlear Implants: Understanding the Challenges of Using Smart Assistants for Deaf and Hard of Hearing Users

Johnna Blair and SAEED ABDULLAH

Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)

Last updated: January 11, 2022

DOI: 10.1145/3432194

#### 2018 J07 Sensing Technologies for Monitoring Serious Mental Illnesses

SAEED ABDULLAH and Tanzeem Choudhury

IEEE Multimedia - Special Issue on New Signals in Multimedia

DOI: 10.1109/MMUL.2018.011921236

# Jo6 Personalized stress monitoring: a smartphone-enabled system for quantification of salivary cortisol

Elizabeth Rey, Aadhar Jain, SAEED ABDULLAH, Tanzeem Choudhury, and David Erickson

Personal and Ubiquitous Computing DOI: 10.1007/s00779-018-1164-z

## 2017 J05 Semi-Automated Tracking: A Balanced Approach for Self-Monitoring Applications

Eun Kyoung Choe, SAEED ABDULLAH, Mashfiqui Rabbi, Edison Thomaz, Daniel A. Epstein, Matthew Kay, Felicia Cordeiro, Gregory D. Abowd, Tanzeem Choudhury, James Fogarty, Bongshin Lee, Mark Matthews, and Julie A. Kientz *IEEE Pervasive Computing* 

DOI: 10.1109/MPRV.2017.18

# 2016 J04 Development and Evaluation of a Smartphone-Based Measure of Social Rhythms for Bipolar Disorder

Mark Matthews, SAEED ABDULLAH, Geri Gay, and Tanzeem Choudhury Assessment (ASM)

DOI: 10.1177/1073191116656794

### 2015 J03 Automatic detection of social rhythms in bipolar disorder

SAEED ABDULLAH, Mark Matthews, Ellen Frank, Gavin Doherty, Geri Gay, and Tanzeem Choudhury

Journal of the American Medical Informatics Association (JAMIA)

DOI: 10.1093/jamia/ocv200

## JO2 Mobile Behavioral Sensing for Outpatients and Inpatients With Schizophrenia

Dror Ben-Zeev, Rui Wang, SAEED ABDULLAH, Rachel Brian, Emily Scherer, Lisa Mistler, Marta Hauser, John Kane, Andrew Campbell, and Tanzeem Choudhury

Psychiatric Services

DOI: 10.1176/appi.ps.201500130

# JO1 Tracking Mental Well-Being: Balancing Rich Sensing and Patient Needs Mark Matthews, SAEED ABDULLAH, Geri Gay, and Tanzeem Choudhury

#### IEEE Computer

DOI: 10.1109/MC.2014.107

#### CONFERENCE PAPERS

## 2021 C19 Assessing effectiveness and interpretability of light behaviors in smart speakers

Sahiti Kunchay and SAEED ABDULLAH

Conversational User Interfaces

Acceptance rate: 29% • DOI: 10.1145/3469595.3469610

# 2020 ★ C18 Will Deleting History Make Alexa More Trustworthy? Effects of Privacy and Content Customization on User Experience of Smart Speakers

Eugene Cho, S. Shyam Sundar, SAEED ABDULLAH, and Nasim Motalebi

CHI Conference on Human Factors in Computing Systems

Acceptance rate: 24.31% • DOI: 10.1145/3313831.3376551

HONORABLE MENTION (TOP 5% OF SUBMISSIONS)

# C17 Alexa as Coach: Leveraging Smart Speakers to Build Social Agents that Reduce Public Speaking Anxiety

Jinping Wang, Hyun Yang, Ruosi Shao, SAEED ABDULLAH, and S. Shyam Sundar

CHI Conference on Human Factors in Computing Systems

Acceptance rate: 24.31% • DOI: 10.1145/3313831.3376561

#### 2018 C16 AlertnessScanner: What Do Your Pupils Tell About Your Alertness

Vincent W.-S. Tseng, SAEED ABDULLAH, Jean Costa, and Tanzeem Choudhury

Conference on human-computer interaction with mobile devices and services (Mobile HCI)

Acceptance rate: 24.5% • DOI: 10.1145/3229434.3229456

## C15 Understanding Challenges in Prehabilitation for Patients with Multiple Chronic Conditions

Haining Zhu, Zachary Moffa, Xiying Wang, SAEED ABDULLAH, Juxihong Julaiti, and John Carroll

Pervasive Health

Acceptance rate: 24% • DOI: 10.1145/3240925.3240959

## 2016 C14 Cognitive Rhythms: Unobtrusive and Continuous Sensing of Alertness Using a Mobile Phone

SAEED ABDULLAH, Elizabeth Murnane, Mark Matthews, Matthew Kay, Julie Kientz, Geri Gay, and Tanzeem Choudhury

Conference on Pervasive and Ubiquitous Computing (UbiComp)
Acceptance rate: 23% • DOI: 10.1145/2971648.2971712

#### C13 Shining (Blue) Light on Creative Ability

SAEED ABDULLAH, Mary Czerwinski, Gloria Mark, and Paul Johns Conference on Pervasive and Ubiquitous Computing (UbiComp)
Acceptance rate: 23% • DOI: 10.1145/2971648.2971751

# C12 CrossCheck: Toward passive sensing and detection of mental health changes in people with schizophrenia

Rui Wang, Min S.H. Aung, SAEED ABDULLAH, Dror Ben-Zeev, Rachel Brian, Andrew T Campbell, Tanzeem Choudhury, Marta Hauser, John Kane, Michael Merrill, Emily Scherer, and Vincent Wen-Sheng Tseng Conference on Pervasive and Ubiquitous Computing (UbiComp)

Acceptance rate: 23% • DOI: 10.1145/2971648.2971740

# ★ C11 Mobile manifestations of alertness: Connecting biological rhythms with patterns of smartphone app use

Elizabeth Murnane, SAEED ABDULLAH, Mark Matthews, Matthew Kay, Julie Kientz, Geri Gay, Tanzeem Choudhury, Dan Cosley Conference on Human-Computer Interaction with Mobile Devices and Services (Mobile HCI)

Acceptance rate: 23.5% • DOI: 10.1145/2935334.2935383
BEST PAPER AWARD (TOP 2 PAPERS)

#### C10 Detecting and Capitalizing on Physiological Dimensions of Psychiatric Illness

Mark Matthews, SAEED ABDULLAH, Geri Gay, and Tanzeem Choudhury Conference on Physiological Computing Systems (PhyCS)

DOI: 10.5220/0005952600980104

# 2015 C09 Social (Media) Jet Lag: How Usage of Social Technology Can Modulate and Reflect Circadian Rhythms

Elizabeth L. Murnane, SAEED ABDULLAH, Mark Matthews, Tanzeem Choudhury, and Geri Gay

Conference on Pervasive and Ubiquitous Computing (UbiComp)

Acceptance rate: 23% • DOI: 10.1145/2750858.2807522

# C08 In Situ Design for Mental Illness: Considering the Pathology of Bipolar Disorder in mHealth Design

Mark Matthews, Stephen Voida, SAEED ABDULLAH, Gavin Doherty, Tanzeem Choudhury, Sangha Im, and Geri Gay

Conference on Human-Computer Interaction with Mobile Devices and Services (Mobile HCI)

Acceptance rate: 27% • DOI: 10.1145/2785830.2785866

#### C07 Collective Smile: Measuring Societal Happiness from Geolocated Images

SAEED ABDULLAH, Elizabeth L. Murnane, Jean MR Costa, and Tanzeem Choudhury

Conference on Computer Supported Cooperative Work & Social Computing (CSCW)

Acceptance rate: 28% • DOI: 10.1145/2675133.2675186

## C06 MoodLight: Exploring Personal and Social Implications of Ambient Display of Biosensor Data

Jaime Snyder, Mark Matthews, Jacqueline Chien, Pamara F. Chang, Emily Sun, SAEED ABDULLAH, and Geri Gay

Conference on Computer Supported Cooperative Work & Social Computing (CSCW)

Acceptance rate: 28% • DOI: 10.1145/2675133.2675191

# 2014 C05 Towards Circadian Computing: "early to bed and early to rise" makes some of us unhealthy and sleep deprived

SAEED ABDULLAH, Mark Matthews, Elizabeth L. Murnane, Geri Gay, and Tanzeem Choudhury

Conference on Pervasive and Ubiquitous Computing (UbiComp)

Acceptance rate: 20% • DOI: 10.1145/2632048.2632100

# 2012 C04 Towards Population Scale Activity Recognition: A Framework for Handling Data Diversity

SAEED ABDULLAH, Nicholas Lane, and Tanzeem Choudhury

AAAI Conference on Artificial Intelligence

Acceptance rate: 26% • DOI: 10.5555/2900728.2900849

### 2011 C03 An Epidemic Model for News Spreading on Twitter

SAEED ABDULLAH and Xindong Wu

Conference on Tools with Artificial Intelligence (ICTAI)

Acceptance rate: 23% • DOI: 10.1109/ICTAI.2011.33

# 2009 C02 **Evolving Multilayer Neural Networks using Permutation free Encoding Technique**

Anupam Das and SAEED ABDULLAH

Conference on Artificial Intelligence (ICAI)

Acceptance rate: 23%

### 2008 C01 Permutation Free Encoding Technique for Evolving Neural Networks

Anupam Das, Md. Shohrab Hossain, SAEED ABDULLAH, and Rashed Ul Islam

International Symposium on Neural Networks (ISNN)

Acceptance rate: 23% • DOI: 10.1007/978-3-540-87732-5 29

#### **BOOK CHAPTERS**

# 2021 B02 Ubiquitous computing for person-environment research: Opportunities, considerations, and future directions

Sumer S. Vaid, SAEED ABDULLAH, Edison Thomaz, and Gabriella M. Harari *Measuring and Modeling Persons and Situations* 

DOI: 10.1016/B978-0-12-819200-9.00020-X

### 2017 B01 Circadian Computing: Sensing, Modeling, and Maintaining Biological Rhythms

SAEED ABDULLAH, Elizabeth L. Murnane, Mark Matthews, and Tanzeem Choudhury

Mobile Health: Sensors, Analytic Methods, and Applications edited by Jim Rehg,

Susan Murphy, and Santosh Kumar DOI: 10.1007/978-3-319-51394-2 3

#### WORKSHOP PAPERS & ABSTRACTS

# 2021 W15 **PTSDialogue: Designing a Conversational Agent to Support Individuals with Post-Traumatic Stress Disorder**

Hee Jeong Han, Sanjana Mendu, Beth K Jaworski, Jason E Owen, and SAEED ABDULLAH

Mental health: Sensing & Intervention (MHSI) workshop at UbiComp

DOI: 10.1145/3460418.3479332

### W14 Voice Assistants for Speech Therapy

Ling Qiu and SAEED ABDULLAH

Mental health: Sensing & Intervention (MHSI) workshop at UbiComp

DOI: 10.1145/3460418.3479336

# W13 Nurse AMIE: Using Smart Speakers to Provide Supportive Care Intervention for Women with Metastatic Breast Cancer

Ling Qiu, Bethany Kanski, Shawna Doerksen, Renate Winkels, Kathryn H.Schmitz, and SAEED ABDULLAH

Late-Breaking paper at the CHI Conference on Human Factors in Computing Systems

Acceptance rate: 39% • DOI: 10.1145/3411763.3451827

## W12 Using Tweets to Assess Mental Well-being of Essential Workers During the COVID-19 Pandemic

Johnna Blair, Chi-Yang Hsu, Ling Qiu, Shih-Hong Huang, Ting-Hao (Kenneth) Huang, and SAEED ABDULLAH

Late-Breaking paper at the CHI Conference on Human Factors in Computing Systems

Acceptance rate: 39% • DOI: 10.1145/3411763.3451612

#### **W11** Context-Specific Usability Measures for Voice Assistants

Sanjana Mendu, S. Shyam Sundar, and SAEED ABDULLAH "Let's Talk About CUIs: Putting Conversational User Interface Design Into Practice" workshop at the CHI Conference on Human Factors in Computing Systems

# 2020 W10 Opportunities for Collaborative Clinical Work: Predicting Relapse Onset in Bipolar Disorder from Online Behavior

Johnna Blair, Erika F.H. Saunders, Dahlia Mukherjee, and SAEED ABDULLAH *Pervasive Health* 

DOI: 10.1145/3421937.3421947

# W09 WatchOver: using Apple watches to assess and predict substance co-use in young adults

Sahiti Kunchay and SAEED ABDULLAH

Mental health: Sensing & Intervention (MHSI) workshop at UbiComp

DOI: 10.1145/3410530.3414373

### 2019 W08 Investigating Users' Perceptions of Light Behaviors in Smart-Speakers

Sahiti Kunchay, Shan Wang, and SAEED ABDULLAH
Conference on Computer Supported Cooperative Work & Social Computing (CSCW)
DOI: 10.1145/3311957.3359479

## W07 Can Alexa be your Therapist? How Back-Channeling Transforms Smart-Speakers to be Active Listeners

Nasim Motalebi, Eugene Cho, S Shyam Sundar, and SAEED ABDULLAH Conference on Computer Supported Cooperative Work & Social Computing (CSCW) DOI: 10.1145/3311957.3359502

# W06 Understanding the Needs and Challenges of Using Conversational Agents for Deaf Older Adults

Johnna Blair and SAEED ABDULLAH Conference on Computer Supported Cooperative Work & Social Computing (CSCW) DOI: 10.1145/3311957.3359487

#### 2018 W05 Conversational agents to provide couple therapy for patients with PTSD

Nasim Motalebi and SAEED ABDULLAH

WellBeCoach: Smart Coaching Solutions for Health & Wellbeing workshop at Pervasive Health

DOI: 10.1145/3240925.3240933

### W04 Supporting Constructive Mental Health Discourse in Social Media

Johnna Blair and SAEED ABDULLAH

#### Design4Diversity workshop at Pervasive Health

DOI: 10.1145/3240925.3240930

# 2016 W03 Assessing mental health issues on college campuses: preliminary findings from a pilot study

Vincent Wen-Sheng Tseng, SAEED ABDULLAH, Michael Merrill, Min Aung, Franziska Wittleder, and Tanzeem Choudhury

Mental health: Sensing & Intervention (MHSI) workshop at UbiComp

DOI: 10.1145/2968219.2968308

# 2015 W02 Towards circadian computing: a sensing & intervention framework for body clock friendly technology

SAEED ABDULLAH

Doctoral Colloquium at UbiComp DOI: 10.1145/2800835.2801657

### W01 Biological rhythms and technology

Mark Matthews, Erin Carroll, SAEED ABDULLAH, Jaime Snyder, Matthew Kay, Tanzeem Choudhury, Geri Gay, Julie Kientz

CHI Conference on Human Factors in Computing Systems

DOI: 10.1145/2559206.2559230

Posters & Demos

#### 2015 P10 Automatic detection of social rhythms in bipolar disorder via smartphone

Ellen Frank, SAEED ABDULLAH, Mark Matthews, and Tanzeem Choudhury American College of Neuropsychopharmacology (ACNP)

### P09 Circadian Computing: Towards bodyclock friendly technology

SAEED ABDULLAH

Human Computer Interaction Consortium Workshop (HCIC)

### P08 SAINT: a scalable sensing and inference toolkit

Mashfiqui Rabbi, Thiago Caetano, Jean Costa, SAEED ABDULLAH, Mi Zhang, and Tanzeem Choudhury

Workshop on Mobile Computing Systems and Applications (ACM HotMobile)

# 2014 P07 Towards circadian computing: "early to bed and early to rise" makes some of us unhealthy and sleep deprived

SAEED ABDULLAH, Mark Matthews, Elizabeth L. Murnane, Geri Gay, and Tanzeem Choudhury

Intel Science and Technology Center for Pervasive Computing (ISTC-PC)

#### P06 Circadian Computing: Towards bodyclock friendly technology

SAEED ABDULLAH

Human Computer Interaction Consortium Workshop (HCIC)

# 2013 P05 Developing a smartphone app to monitor mood, social rhythms, sleep and social activity: technology to support effective management of bipolar disorder

Ellen Frank, Mark Matthews, Tanzeem Choudhury, Steve Voida, and SAEED ABDULLAH

American College of Neuropsychopharmacology (ACNP)

### 2013 P04 Light, color, affect, and stress

Jaime Snyder, Mark Matthews, SAEED ABDULLAH, Yohan Ko, and Geri Gay Society for Social Studies of Science (4S)

### P03 MoodRhythm: Tracking and supporting daily rhythms

Stephen Voida, Mark Matthews, SAEED ABDULLAH, Mengxi Chrissie Xi, Matthew Green, Won Jun Jang, Donald Hu, John Weinrich, Prashama Patil, Mashfiqui Rabbi, Tauhidur Rahman, Geri Gay, Ellen Frank, and Tanzeem Choudhury Interactive demo at UbiComp

### P02 Clockwise: inferring chronotype and daily patterns from smartphone use

SAEED ABDULLAH

Doctoral Colloquium at UbiComp

# 2012 P01 Towards population scale activity recognition: a framework for handling data diversity

SAEED ABDULLAH, Nicholas D. Lane, and Tanzeem Choudhury Intel Science and Technology Center for Pervasive Computing (ISTC-PC)

#### **TEACHING**

### 2021 - HCDD 340: Human-Centered Design for Mobile Computing

College of Information Sciences and Technology, Penn State
Co-designed curriculum, developed syllabus, designed instruction material

### 2019 - IST 331: Foundations of Human-Centered Design

College of Information Sciences and Technology, Penn State Developed syllabus, designed instruction material

#### 2018 – 2019 IST 525: Computer Supported Cooperative Work (CSCW)

College of Information Sciences and Technology, Penn State

### Developed syllabus, designed instruction material

#### 2017 - 2018 IST 597: Computational Health: Sensing and Intervention Design

College of Information Sciences and Technology, Penn State Developed syllabus, designed instruction material

### 2014 - 2016 Info 4120/6120: Ubiquitous Computing

Department of Information Science, Cornell University. Instructor: Tanzeem Choudhurv

Delivered a guest lecture on Circadian Computing and led a lab session on mobile programming

### Spring, 2012 CS/Info 2300: Intermediate design and programming for the web

Department of Information Science, Cornell University. Instructor: Carl Lagoze. Led lab teaching sections and covered some lectures

#### Fall, 2012 CS 4300: Information retrieval

Department of Information Science, Cornell University. Instructor: Paul Ginsberg. Tutored students and graded assignments

### Spring, 2011 CS 224: Algorithm design & analysis

*University of Vermont. Instructor: Byung Lee*Covered some lectures, tutored students, and marked assignments

#### Fall, 2010 CS 32: Puzzles, games and algorithms

*University of Vermont. Instructor: Robert Snapp* Led lab sessions and marked assignments

#### CS 204: Database system

*University of Vermont. Instructor: Byung Lee*Covered some lectures, tutored students, and marked assignments

### Spring, 2010 CS 222: Computer architecture

University of Vermont. Instructor: Alan Ling Tutored students and marked assignments

### CS 195: Computer science for geo-spatial technologies

Instructor: Alison Pechenick
Developed and marked assignments

#### Fall, 2009 CS 201: Operating systems

*University of Vermont. Instructor: Alan Ling*Covered some lectures, tutored students, and marked assignments

#### CS 243: Theory of computation

University of Vermont. Instructor: Alan Ling Tutored students and marked assignments

#### RESEARCH SUPPORT

# 2019 - 2021 CRII:SCH: Designing for Supportive Accountability: Using Conversational Agents to Sustain Patient Engagement in PTSD

Principal Investigator

National Science Foundation (\$174, 818)

### 2019 - 2021 Nurse AMIE (Addressing Metastatic Individuals Everyday)

Co-Investigator

American Institute for Cancer Research (\$165,000)

# 2018 - 2021 A Real-Time Mindfulness Intervention to Control Pain: Delivery Through a Conversational Agent

Principal Investigator

Social Science Research Institute (SSRI), Penn State (\$20, 000)

### 2018 - 2021 Predicting Relapse Onset in Bipolar Disorder from Online Behavioral Data

Principal Investigator

Institute for CyberScience (ICS), Penn State (\$37, 500)

# 2019 – 2020 Watch Over: Using Apple Watches to Assess and Predict Substance Co-use in Young Adults

Principal Investigator

College of Information Sciences and Technology, Penn State(\$53, 260)

# 2018 - 2019 Talking to Machines: Virtual Conversational Agents for Effective Treatment Delivery in PTSD

Principal Investigator

College of Information Sciences and Technology, Penn State (\$56, 310)

#### **AWARDS**

#### 2020 **Honorable Mention**

CHI Conference on Human Factors in Computing Systems

For the paper: "Will Deleting History Make Alexa More Trustworthy? Effects of Privacy and Content Customization on User Experience of Smart Speakers"

#### Distinguished Master's Thesis Award

Graduate School, Penn State

Awarded to Shan Wang (my advisee) for "excellence in master's level thesis research". Her thesis title is: "Effects of Prompt Humor Level on Behavioral Intention and Perceived Interruption: An Online Survey Study".

#### 2019 Junior Faculty Excellence Award in Research

College of Information Sciences and Technology, Penn State

This award recognizes "innovative and outstanding research results, contributed to breakthrough and high impact research, or demonstrated the potential to solve challenging research problems".

#### 2018 Tronzo Medical Informatics Endowment

College of Information Sciences and Technology, Penn State

The endowment supports research on issues and technologies related to medical informatics.

#### 2016 - 2017 Special recognition for outstanding reviews

IMWUT (May 2017 round) UbiComp 2016

#### 2016 Best Paper Award

Conference on human-computer interaction with mobile devices and services (Mobile HCI)

For the paper: Mobile manifestations of alertness: Connecting biological rhythms with patterns of smartphone app use.

#### **Agile Research Grant**

Robert Wood Johnson Foundation

Our project focusing on circadian rhythms and cognitive performance was selected as one of the five recipients in the Agile Research Project competition.

#### 2013 \$100,000 Heritage Open mHealth Challenge winner

Heritage Provider Network, Open mHealth, and the University of California, Los Angeles

Our MoodRhythm project focusing on bipolar disorder won the Heritage Open mHealth Challenge.

#### INVITED TALKS

2021	Talking to Machines: Leveraging Voice Interfaces for Intervention Delivery
	Center for Behavioral Health and Technology, University of Virginia

# 2020 Designing for Supportive Accountability: Using Conversational Agents to Sustain Patient Engagement in Post-traumatic stress disorder (PTSD)

Advancing Health through Science Smart and Connected Health (SCH) Principal Investigator Meeting, National Science Foundation

# 2019 Computational Health: Using HCI & Data Science Methods to Improve Health and Wellbeing

Dean's Advisory Board, College of Information Sciences and Technology

# "Alexa, I am in Pain!": A Real-Time Mindfulness Intervention for Chronic Pain Management Using Conversational Agents

Prevention Research Center (PRC) Day, College of Health and Human Development, Penn State

# 2018 Your phone usage reveals a lot about you: Inferring sleep and circadian disruptions from phone use patterns

QuantDev Brownbag Series, College of Health and Human Development, Penn State

# **Talking to Machines: Conversational Agents for Mental Health Care**Colloquium at UT Austin iSchool

**Talking to Machines: Conversational Agents for Mental Health Care** *Grand Rounds Series, Department of Psychology at Penn State* 

# 2016 Passive sensing of circadian rhythms for individualized models of cognitive performance

Health Data Exploration Project Agile Grant Series

# 2015 Cognitive rhythms: unobtrusive and continuous sensing of alertness using a mobile phone

*Intel Science & Technology Center for Pervasive Computing (ISTC-PC)* 

# 2014 Supporting individuals with bipolar disorder to establish stable daily routines MIT & Cornell hacking-medicine hackathon

#### PROFESSIONAL EXPERIENCE

#### 2012 - 2017 Graduate Research Assistant

Department of Information Science, Cornell University. Supervisor: Tanzeem Choudhury

#### Fall, 2015 **Research Intern**

Microsoft Research. Supervisor: Mary Czerwinski
Designed and developed novel system for improving creative ability

#### 2011 - 2012 Graduate Teaching Assistant

Department of Information Science, Cornell University

### 2009 - 2011 Graduate Teaching Assistant

**University of Vermont** 

### 2008 – 2009 Software Developer

AfriGIS Ltd

Developing search engine with special focus on geographic relevance

### 2008 Software Developer

Google Summer of Code

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

#### SERVICE

#### **EDITORIAL RESPONSIBILITIES**

#### 2021 Topic Editor

Frontiers Research Topic: "Quantitative Modeling of Psychopathology Using Passively Collected Data"

#### 2017 – 2020 Associate Editor

Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)

### 2018 Co-Editor

Special Issue of JMIR on Computing and Mental Health

### CONFERENCE & WORKSHOP ORGANIZER

2021 Scholarship co-chail	2021	Scholarship co-chai
---------------------------	------	---------------------

Conference on Pervasive and Ubiquitous Computing (UbiComp)

### 2016 - Workshop on "Mental health and well-being: Sensing and intervention"

Conference on Pervasive and Ubiquitous Computing (UbiComp)

#### 2019 **Publicity co-chair**

Conference on Pervasive and Ubiquitous Computing (UbiComp)

### 2014 Workshop on "Biological rhythms and technology"

CHI Conference on Human Factors in Computing Systems

#### PROGRAM COMMITTEE MEMBER

### 2016 - Workshop on "Mental health and well-being: Sensing and intervention"

Conference on Pervasive and Ubiquitous Computing (UbiComp)

#### 2017 - 2020 Pervasive Health

EAI International Conference on Pervasive Computing Technologies for Healthcare

#### 2015 – 2018 International Conference on Digital Health

# 2017 Workshop on "Tools and Algorithms for Mental Health and Wellbeing, Pain, and Distress (MHWPD)"

Affective Computing and Intelligent Interaction (ACII)

ACADEMIC SERVICES

### 2021 - Chair of the Faculty Hiring Committee (accessibility track)

College of Information Sciences and Technology, Penn State

### 2020 - Academic Integrity Committee

College of Information Sciences and Technology, Penn State

#### 2019 - Advisory Board Member

Penn State SELF (Student Engagement, Learning, and Flourishing) project

### 2017 - Governing Board Member

Human Computer Interaction Consortium (HCIC)

### 2017 - Faculty advisory committee focusing on IT support for research

College of Information Sciences and Technology, Penn State

#### 2018 - 2020 Faculty Hiring Committee (HCD track)

College of Information Sciences and Technology, Penn State

#### **Graduate Recruiting Committee**

College of Information Sciences and Technology, Penn State

#### 2020 Application Reviewer

Nittany AI Challenge, Penn State

### 2017 Application Reviewer

Schreyer Honors College, Penn State

#### **Applicant Interviewer**

Millennium Scholars program, Penn State

#### 2015 **Student Volunteer**

Program committee meeting for Conference on Pervasive and Ubiquitous Computing (UbiComp)

#### 2013 - 2015 **Student Representative**

Faculty hiring committee, Department of Information Science, Cornell University

#### 2011 - 2013 Colloquium Organizer

Department of Information Science, Cornell University

### 2011 - 2012 **Computing facilities support**

Department of Information Science, Cornell University