Hee Jeong Han

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Education

Pennsylvania State University, University Park, Pennsylvania   Sep. 2020 – present
  Doctor of Philosophy in Informatics [**GPA** 4.0 / 4.0]
  Advisor: Saeed Abdullah

University of California, Irvine, Irvine, California   Sep. 2017 – Jun. 2019
  Master of Science in Computer Science [**GPA** 3.76 / 4.0]
  Advisor: Nikil Dutt
  Thesis: Objective Stress Monitoring based on Wearable Sensors in Everyday
  Settings

Ewha Womans University, Seoul, Korea   Mar. 2012 – Feb. 2017
  Bachelor of Science in Computer Science & Engineering
  Advisor: Dong Sub Cho

University of Hawaii at Manoa, Manoa, Hawaii   Jan. 2014 – Dec. 2014
  Exchange Student [22 credits]

École pour l'informatique et les techniques avancées, Paris, France   Jul. 2013
  Graduate School of Computer Science and Advanced Technologies
  Summer course for Web Security [3 credits]

Publications

(In press) 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   2021
Mental health: Sensing & Intervention (MHSI) workshop at UbiComp

Objective stress monitoring based on wearable sensors in everyday settings
Han, Hee Jeong, Sina Labbaf, Jessica L. Borelli, Nikil Dutt, and Amir M. Rahmani   2020
Journal of Medical Engineering & Technology 44, no. 4: 177-189

Pedestrian Management System for Real-time Pedestrian Detection
Hee Jeong Han, Miso Kwon, You Hyun Kang, Dong Sub Cho   2016
Proceedings of Korea Multimedia Society Conference of the Spring
  Best Paper Award, Korea Multimedia Society Conference of the Spring 2016

Pedestrian Pattern Classification For the Pedestrian Counting Systems using Key Matrix
Hee Jeong Han, You Hyun Kang, Miso Kwon, Dong Sub Cho   2016
Proceedings of Korea Computer Congress
  Best Paper Award, Korea Computer Congress 2016

Pedestrian Safety Management Systems based on Multiple-input enabled F-pad
Hee Jeong Han, You Hyun Kang, Miso Kwon, Dong Sub Cho   2016
Proceedings of The Korean Institute of Electrical Engineers(KIEE) Summer Conference

A System on the Formation of Pedestrian Pattern for Pedestrian Volume Analysis
You Hyun Kang, Miso Kwon, **Hee Jeong Han**, Dong Sub Cho
Proceedings of The 2016 Spring Conference of the Korea Information Processing Society (KIPS)

2016

Adaptive for time-varing clustering DBSCAN," in *Proceedings of 2016 Information and Control Symposium*
Miso Kwon, You Hyun Kang, **Hee Jeong Han**, Dong Sub Cho
Proceedings of 2016 Information and Control Symposium

2016

Research Experience

Graduate Research Assistant   Sep. 2020 – Present
Wellbeing & Health Innovation (WHI) Lab
College of Informatics Science and Technology, Pennsylvania State University, University Park, Pennsylvania

PTSDialogue - A conversational agent to sustain patient engagement in PTSD   Sep. 2020 – Present
Develops a conversational agent that can deliver therapeutic content and provide supportive accountability in PTSD and assesses feasibility and acceptability of the developed conversational agent for sustaining engagement with patients with PTSD.

Graduate Research Assistant   Jun. 2018 – Jul. 2019
Dutt Research Group
Department of Computer Science, University of California, Irvine, Irvine, California

Healthcare IoT - Ubiquitous Stress Monitoring using Shimmer's Device   Jun. 2018 – Jul. 2019
Proposed a new stress monitoring system. Its algorithm, using PPG, ECG and GSR sensors on wearable device, predicts stress level in everyday settings.

Undergraduate Research Assistant   Aug. 2015 – Jun. 2016
Computer Architecture and System Design Laboratory
Department of Computer Science and Engineering, Ewha Womans University, Seoul, Korea

Multimodal Pedestrian Counting System using Key-Matrix pad and Sonic-Bar
Proposed new pedestrian counting system. It contains two algorithms, Adaptive-DBSCAN and Pedestrian Algorithm. and two new hardwares, F-pad and Sonic-Bar.

Projects

Human-Centered Design Project   Jan. 2021 – Jun. 2021
WiSDoM: Guiding Internet Users Toward Safer PrivacyDecisions
Built a Chrome extension tool that informs users about their disclosing behaviors. It is powered by a BERT-based objective disclose detection model.

IoT Data Management Project   Apr. 2019 – Jun. 2019
Acquisition Manager
Built acquisition manager of the Perpetual DB, which requires a way to pass the raw data from various sources. The acquisition engine will handle message passing from various sources to the ingestion engine on Apache Kafka.

Individual Research Project   Apr. 2018 – Jun. 2018
Stress Monitoring with PPG and GSR
      Built the stress monitoring system using PPG sensor and GSR sensors on SHIMMER device. It contains the server, database and application for gathering data and showing the result.

Health Intelligence Project   Apr. 2018 – Jun. 2018
Stress Monitoring with food intake
      Investigated the relation between stress and food intake. Stress is analyzed by food intake based on heart rate and heart rate variability.

Embedded System Project   Sep. 2017 – Dec. 2017
Physiological signals Monitoring
      Calculated heart rate, respiration rate, and SPO2 based on collected data from hardware including PPG sensor and 3D accelerometer and investigated the relation between physiological signals and daily activities.

Computer Network Project   Sep. 2016 – Dec. 2016
Long Life to you
      Built a network between IoT devices and servers to provide exercise service for elder people.

Smart Software Project   Mar. 2015 – Jun. 2015
Fettler
      Investigated the sewage system using a Smart Car based on Arduino hardware. It finds the path autonomously based on infrared sensors for exploration of the sewage.

Awards

CRA-WP Grad Cohort for Women	Apr, 2021
Silver Prize in the 2016 Ewha Engineering Student Portfolio Contest	Dec. 2016
Hoakipa Scholarship, University of Hawaii at Manoa	Jan. 2014 – Dec. 2014
Merit Scholarship from Megastudy Group, Seoul, Korea	Mar. 2012 – Jun. 2012

Work Experience

Mother Tongue, Seoul, Korea   Feb. 2017 – Aug. 2017
Editor, Writer
      Edited "Visual Phonics" for children learning English phonics first with images and songs. I wrote and edited "Middle School English Grammar 3800" series for 7th to 9th grade students.

Health Technology Assessment International 10th Annual Meeting, Seoul, Korea   Jun. 2013
Conference Staff
      Aided foreign speakers and audience with administrative support, and managed keynote back-up system.

Extracurricular Activities

Ubicomp/ISWC 2021
  Student Volunteer   Sep. 2021

International Summer Undergraduate Research Fellowship,   Jun. 2018 – Aug. 2018
University of California, Irvine, Irvine, California
  Mentor
        Mentored undergraduate researchers working on healthcare IoT

Career Mentoring, Ewha Womans University, Seoul, Korea   Mar. 2013 – Jun. 2013
  Leader of IT section Team
        Researched Korean software and network equipment market from a
        prospected technology report, and also researched future technology such as
        Google Glass and 3Doodler

Korean Tutor for Foreign Students, Ewha Womans University, Seoul, Korea   Mar. 2013 – May 2013
  Tutor
        Taught Korean to foreign students

Hanwoori, University of Hawaii, Manoa, Hawaii   Jan. 2014 – Dec. 2014
  Club Member
        Actively participated in the Korean Culture Club to introduce Korea culture to
        university students

Certification

Level 2 of Test Of Practical Competency in ICT (TOPCIT)
  TOPCIT is a performance-evaluation-centered test designed to diagnose and assess the competency of ICT
  specialists and SW developers critically needed to perform jobs on the professional frontier.

Accreditation Board for Engineering Education of Korea (ABEEK)
  Korean version of Accreditation Board for Engineering and Technology (ABET)