## **Chunjong Park**

Paul G. Allen School of Computer Science & Engineering UW, 185 E Stevens Way NE, Seattle, WA 98195

cjparkuw@cs.washington.edu

http://cjpark.xyz

RESEARCH

Ubiquitous Computing, Human-Computer Interaction

**INTERESTS** 

Novel sensing systems for health and interaction using computer vision, machine learning, and signal processing.

**EDUCATION** 

University of Washington

Research Assistant

SEP.  $2017 \sim$ 

Ph.D., Computer Science & Engineering, (Advisor: Shwetak Patel)

Korea Advanced Institute of Science and Technology (KAIST)

FEB. 2017

M.S., Computer Science, (Advisor: Sung-Ju Lee)

Korea Advanced Institute of Science and Technology (KAIST)

FEB. 2015

B.S., Computer Science, (Advisor: Sue Moon)

RESEARCH **EXPERIENCES**  Ubicomp Lab., University of Washington

SEATTLE, WA

Sep. 2017  $\sim$ 

Designing and building mobile health application that can be used easily and safely by ordinary people.

- Smartphone camera-based user-facing health sensing applications for rapid diagnostic test capture and interpretation, capillary refill time measurement, and corneal topography.
- · Improving interpretability and reliability of deep learning models for consumer-facing health applications
- Analyze user behaviors from large scale data collected from consumer-facing health devices and applications.

Microsoft Research REDMOND, WA Jun.  $2020 \sim \text{Sept. } 2020$ 

Research Intern

(Manager: Ken Hinckley, Mentors: Michel Pahud, Eyal Ofek, Teddy Seyed) Built sensor-mediated interaction techniques for seamless content sharing in multi-device, multi-user environment, using proxemics and micro-mobility.

Snap Inc. SEATTLE, WA

Research Intern (Manager: Andrés Monroy-Hernández) Jun.  $2019 \sim Dec. 2019$ 

Built a non-textual communication application on smartphone and wearable by seamlessly recommending appropriate avatars that represent user's current context. Prototypes released in App Store (Significant Otter, BFF)

Nokia Bell Labs CAMBRIDGE, UK Research Intern Jun.  $2018 \sim Sept. 2018$ 

(Manager: Fahim Kawsar, Mentors: Alberto Gil Ramos, Sourav Bhattacharya)

Built strongly labeled audio dataset and a deep learning model on IoT devices for understanding ambient contexts.

Networking & Mobile Systems Lab., KAIST

DAEJEON, KOREA

Research Assistant

Mar.  $2015 \sim Jul. 2017$ 

Worked on exploring context-aware smartphone notification management, understanding thermal characteristics of smartphones, and exploring better use of micro spare time.

Advanced Networking Lab., KAIST

DAEJEON, KOREA

Undergraduate Researcher

Jul.,  $2014 \sim Mar$ , 2015

Worked on improving TCP congestion control in a datacenter. Designed and implemented a module that measures latency of TCP packets with a sub-microsecond accuracy.

**PUBLICATIONS** 

Significant Otter: Understanding the Role of Biosignals in Communication

Fannie Liu, **Chunjong Park**, Yu Jiang Tham, Tsung-Yu Tsai, Laura Dabbish, Geoff Kaufman, Andrés Monroy-Hernández

ACM Conference on Human Factors in Computing Systems (CHI), May. 2021

Online Mobile App Usage as an Indicator of Sleep Behavior and Job Performance

Chunjong Park, Morelle Arian, Xin Liu, Leon Sasson, Jeffrey Kahn, Shwetak Patel, Alex Mariakakis, Tim Althoff

The Web Conference (WWW), Apr. 2021

The Design and Evaluation of a Mobile System for Rapid Diagnostic Test Interpretation

Chunjong Park, Hung Ngo, Libby Rose Lavitt, Vincent Karuri, Shiven Bhatt, Peter Lubell-Doughtie, Anuraj H. Shankar, Leonard Ndwiga, Victor Osoti, Juliana K. Wambua, Philip Bejon, Lynette Isabella Ochola-Oyier, Monique Chilver, Nigel Stocks, Victoria Lyon, Barry R. Lutz, Matthew Thompson, Alex Mariakakis, Shwetak Patel

Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Mar. 2021

Diagnostic accuracy of an app-guided, self-administered test for influenza among individuals presenting to general practice with influenza-like illness: study protocol

Victoria Lyon, Monica Zigman Suchsland, Monique Chilver, Nigel Stocks, Barry Lutz, Philip Su, Shawna Cooper, **Chunjong Park**, Libby Rose Lavitt, Alex Mariakakis, Shwetak Patel, Chelsey Graham, Mark Rieder, Cynthia LeRouge, Matthew Thompson

BMJ Open, Nov. 2020

Augmenting Conversational Agents with Ambient Acoustic Contexts

Chunjong Park, Chulhong Min, Sourav Bhattacharya, Fahim Kawsar

ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (Mobile-HCI), Oct. 2020

Supporting Smartphone-Based Image Capture of Rapid Diagnostic Tests in Low-Resource Settings

**Chunjong Park**, Alex Mariakakis, Jane Yang, Diego Lassala, Yasamba Djiguiba, Youssouf Keita, Hawa Diarra, Beatrice Wasunna, Fatou Fall, Marème Soda Gaye, Bara Ndiaye, Shwetak Patel, Ari Johnson, Isaac Holeman *International Conference on Information and Communication Technologies and Development (ICTD*), Jun. 2020

Fire in Your Hands: Understanding Thermal Behavior of Smartphones

Soowon Kang, Hyeonwoo Choi, Soo Young Park, **Chunjong Park**, Jemin Lee, Uichin Lee, and Sung-Ju Lee *ACM Conference on Conference on Mobile Computing and Networking (MobiCom)*, Oct. 2019

"Don't Bother Me. I'm Socializing!": A Breakpoint-Based Smartphone Notification System

Chunjong Park, Junsung Lim, Juho Kim, Sung-Ju Lee, and Dongman Lee

ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), Feb. 2017

Zaturi: We Put Together the 25th Hour for You. Create a Book for Your Baby

Bumsoo Kang, Chulhong Min, Wonjung Kim, Inseok Hwang, **Chunjong Park**, Seungchul Lee, Sung-Ju Lee, and Junehwa Song

ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), Feb. 2017

DX: Accurate Latency-based Congestion Feedback for Datacenters

Changhyun Lee, **Chunjong Park**, Keon Jang, Sue Moon, and Dongsu Han

IEEE/ACM Transaction on Networking, Feb. 2017

Accurate Latency-based Congestion Feedback for Datacenters

Changhyun Lee, Chunjong Park, Keon Jang, Sue Moon, and Dongsu Han

USENIX Annual Technical Conference (ATC), Jul. 2015

**PATENTS** 

Non-Textual Communication and User States Management Andrés Monroy-Hernández, **Chunjong Park**, and Fannie Liu

U.S. Patent App. Filed, September 2020

Work Content N SEOUL, KOREA

EXPERIENCES Lead Software Engineer OCT.  $2013 \sim MAR$ . 2014

Designed and developed back-end systems for a mobile arcade game, Sushi Master, using Amazon AWS, Node.js, MongoDB, and Redis. Developed data analysis tool and web interface for game statistics.

Company 100, Inc. SEOUL, KOREA

Software Engineer Mar.  $2012 \sim Oct. 2013$ 

Designed and developed back-end systems for a mobile action-RPG game, MetalBreaker, using Amazon AWS, Node, js, MongoDB, and Redis. Developed data analysis tool and web interface for game statistics.

SQISoft, Inc. SEOUL, KOREA

Software Engineer Dec.  $2010 \sim Mar. 2012$ 

Developed billing system for heat & electricity, and face recognition-based immigration clearance system deployed at the Incheon Int'l Airport.

Nexon Corp. SEOUL, KOREA

Intern Sep.  $2010 \sim Dec.\ 2010$ 

Developed an in-game chat module in *BubbleFighter* online game.

**TEACHING Teaching Assistant** University of Washington

**Introduction to Computer Communication Networks** WINTER 2018, FALL 2017 **EXPERIENCE** 

> Teaching Assistant **KAIST**

> **Introduction to Computer Networks SPRING 2016, SPRING 2015**

> **Teaching Assistant KAIST**

**Networking for Smartphone Systems and IoT** 

**FALL 2015** 

PROGRAMMING • Language: C, C++, Java, Javascript/Node.js, Python, Objective-C, Swift

• OS/Platform: Linux/Ubuntu, Android, iOS/WatchOS SKILLS • Hardware: Arduino

• Framework/Library/Version Control: OpenCV, scikit-learn, PyTorch, Git

Reviewer IMWUT 2018, 2019, 2020, CHI 2019, 2020, 2021 ACADEMIC

MobileHCI 2019, ISWC 2020, IEEE Pervasive Comp. 2020 SERVICES

Student Volunteer Ubicomp 2019, 2020

Microsoft W+D Summer 2020 Hackathon Winners MICROSOFT, AUG. 2020 AWARDS

> Outstanding Teaching Assistant Award KAIST, MAR. 2017 Outstanding M.S. Thesis Award KAIST, FEB. 2017 Outstanding Teaching Assistant Award KAIST, MAR. 2016

> The 9th Open Source SW World Challenge, Silver Medal KOSSA, DEC. 2015