# JONGGI HONG

#### Ph.D. candidate, Computer Science, University of Maryland, College Park

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**♀** College Park, MD, USA

% https://jonggi.github.io

### **EDUCATION**

University of Maryland, College Park **Doctor of Philosophy, Computer Science** 

September 2014 - February 2021 (Expected)

Ocollege Park, Maryland, USA

Advisor: Hernisa Kacorri

Thesis: Exploring Blind and Sighted Users' Interactions with Error-Prone Speech and Image Recognition

Korea Advanced Institute of Science and Technology **Master of Science, Computer Science** 

September 2012 - August 2014 Oaejeon, South Korea

Advisor: Geehyuk Lee

Thesis: FlickBoard: A Simple Split Soft Keyboard for Small Touch Screens

Korea Advanced Institute of Science and Technology **Bachelor of Science, Computer Science (summa cum laude)** 

February 2006 - December 2011 **Q** Daejeon, South Korea

### PROFESSIONAL EXPERIENCE

University of Maryland, College Park. Research Assistant

September 2017 - February 2021 (Expected)

Intelligent Assistive Machines Lab

Advisor: Hernisa Kacorri Project: Developing a teachable interface of an object recognizer for people with visual impairments

Microsoft Research. Research Intern

Ability team, Future of work community

**June 2020 - September 2020** 

**♀** College Park, Maryland, USA

Redmond, WA, USA (Remote)

Mentors: Daniela Massiceti, Edward Cutrell, Cecily Morrison, Sagib Shaikh

Projects: Building an interactive video recording interface for people with visual impairments, exploring the challenge

of identifying ASR errors with audio-only interactions

Adobe Research. Research Intern

Systems Technology Lab

May 2018 - August 2018 San Jose, CA, USA

Mentors: Tak Yeon Lee, Eunyee Koh

Project: Classifying the semantic misalignments between link and landing page with machine learning

University of Maryland, College Park. Research Assistant

September 2015 - August 2017

Inclusive Design Lab

♥ College Park, Maryland, USA

Advisor: Leah Findlater

Projects: Exploring the challenge of identifying ASR errors with audio-only interactions, developing haptic wristbands

that provide directional guidance to users with visual impairments

### **TALKS**

Video Recording Guidance App for People with Visual Impairments

Microsoft Research, 2020

Crowdsourcing the Perception of Machine Teaching

UMD HCIL Symposium, 2020

Reviewing Speech Input with Audio: Differences Between Blind and Sighted Users

UMD HCIL Symposium, 2019

Classifying Semantic Misalignments between Links and Landing Pages

Adobe Research, 2018

SplitBoard: A Simple Split Soft Keyboard for Wristwatch-sized Touch Screens

UMD HCIL Symposium, 2015

### **HONORS & AWARDS**

Selected as HCIC 2019 student attendee	June 2019
UbiComp 2018 doctoral consortium	October 2018
Goldhabor travel grant	May 2018
International conference student support award	May 2018
Summer dean's fellowship	May 2015
HCII 2014 best paper award	June 2014
Summa cum laude (Korea Advanced Institute of Science and Technology)	February 2012
Full tuition waiver (Korea Advanced Institute of Science and Technology)	February 2006 - December 2011

### **PUBLICATIONS**

#### PEER-REVIEWED PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

- P.9 **Jonggi Hong**, Ernest Essuah Mensah, Hernisa Kacorri. 2021. Generating Accessible Descriptors for Training Data in Teachable Applications for the Blind. *Under review*.
- P.8 Jonggi Hong, Kyungjun Lee, June Xu, Hernisa Kacorri. 2020. Crowdsourcing the Perception of Machine Teaching. In Proc. SIGCHI Conference on Human Factors in Computing Systems (CHI 2020). 1-14. Acceptance rate: 24.3%
- P.7 Kyungjun Lee, **Jonggi Hong**, Ebrima Jarjue, Simone Pimento, Hernisa Kacorri. 2019. Revisiting Blind Photography in the Context of Teachable Object Recognizers. In *Proc. International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2019)*. 83-95.

Acceptance rate: 26%

- P.6 **Jonggi Hong**, Leah Findlater. 2018. Identifying Speech Input Errors Through Audio-Only Interaction. In *Proc. SIGCHI Conference on Human Factors in Computing Systems (CHI 2018)*. 567:1–567:12. Acceptance rate: 25.7%
- P.5 Jonggi Hong, Alisha Pradhan, Jon E. Froehlich, Leah Findlater. 2017. Evaluating Wrist-Based Haptic Feedback for Non-Visual Target Finding and Path Tracing on a 2D Surface. In *Proc. International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2017)*, 210-219.

Acceptance rate: 26.2%

- P.4 Kristin Williams, Karyn Moffatt, **Jonggi Hong**, Yasmeen Faroqi-Shah, Leah Findlater. 2016. The Cost of Turning Heads: A Comparison of a Head-Worn Display to a Smartphone for Supporting Persons With Aphasia in Conversation. In *Proc. International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2016)*, 111-120. Acceptance rate: 25%
- P.3 Jonggi Hong, Lee Stearns, David Ross, Jon Froehlich, Leah Findlater. 2016. Evaluating Angular Accuracy of Wrist-based Haptic Directional Guidance for Hand Movement. In *Proc. Graphics Interface Conference (GI 2016)*, 195-200

Acceptance rate: 39%

P.2 **Jonggi Hong**, Seongkook Heo, Poika Isokoski, Geehyuk Lee. 2015. SplitBoard: A Simple Split Soft Keyboard for Wristwatch-sized Touch Screens. In *Proc. SIGCHI Conference on Human Factors in Computing Systems (CHI 2015)*, 1233-1236.

Acceptance rate: 25%

P.1 Jooyeun Ham, **Jonggi Hong**, Youngkyoon Jang, Seung Hwan Ko, Woontack Woo. 2014. Smart Wristband: Touchand-motion-tracking Wearable Input Device for Smart Glasses. In *Proc. International Conference on Human-Computer Interaction (HCII 2014)*, 109-118. (Best paper awarded)

Acceptance rate: N/A

#### PEER-REVIEWED JOURNAL ARTICLES

- J.5 Utkarsh Dwivedi, Merijke Coenraad, Jonggi Hong, Jaina Gandhi, Raj A Parikh Parikh, Ghazaleh Keshavarz, Elizabeth Bonsignore, Hernisa Kacorri. 2021. Co-designing Teachable Machines with Children. Under review.
- J.4 Amanda Lazar, Robin N. Brewer, Hernisa Kacorri, Jonggi Hong, Mary Nicole Dugay Punzalan, Maisarah Mahathir, Olivia K. Richards, Warren Ross III. 2021. How Content Authored by People with Dementia Affects Attitudes towards Dementia. Under review.
- J.3 Jonggi Hong, Christine Vaing, Hernisa Kacorri, Leah Findlater. 2020. Reviewing Speech Input with Audio: Differences Between Blind and Sighted Users. ACM Transactions on Accessible Computing (TACCESS). 13, 1, Article 2 (April 2020).

Impact factor: 1.57

J.2 Jonggi Hong, Seongkook Heo, Poika Isokoski, Geehyuk Lee. 2016. Comparison of Three QWERTY Keyboards for a Smartwatch. Interacting with Computers. 28(6), 811-825.

Impact factor: 1.41

J.1 Jonggi Hong, Geehyuk Lee, Hwan Kim, Woohun Lee. 2015. TouchRoller: A Touch-sensitive Cylindrical Input Device for GUI Manipulation of Interactive TVs. Interacting with Computers. 28(3), 293-310. Impact factor: 1.41

#### **WORKSHOP AND POSTER PAPERS**

- W.6 Jonggi Hong, Kyungjun Lee, June Xu, Hernisa Kacorri, Exploring Machine Teaching in Object Recognition with the Crowd. Human Computer Interaction Consortium (HCIC 2019).
- W.5 Jonggi Hong, Kyungjun Lee, June Xu, Hernisa Kacorri, Exploring Machine Teaching in Object Recognition with the Crowd. In Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA 2019).
- W.4 Jonggi Hong. Accessible Human-Error Interactions in AI Applications for the Blind. Doctoral Colloquium at Ubi-Comp 2018.
- W.3 Jonggi Hong, Leah Findlater. Correcting Errors in Speech Input During Non-Visual Use. Ubiquitous Text Input Workshop at CHI 2017.
- W.2 Jooyeun Ham, Jonggi Hong, Youngkyoon Jang, Seung Hwan Ko, Woontack Woo. 2014. Poster: Smart Glasses' Augmented Wearable Interface based on Wristband-type Motion-aware Touch Panel. Poster. 3D User Interfaces (3DUI), IEEE Symposium on, 147-148.
- W.1 Jonggi Hong, Geehyuk Lee. 2013. TouchShield: A Virtual Control for Stable Grip of a Smartphone Using the Thumb. In Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA 2013).

### **PATENTS**

Geehyuk Lee, Jonggi Hong. Graphical user interface (GUI) widget for stable holding and control of smart phone based on touch screen. US Patent App. 13/711,553

USA, 2012

### **TEACHING**

#### Seminar in Research Methods and Data Analysis (INST808)

Spring 2020

Graduate Teaching Assistant. University of Maryland, College Park (Graduate level, 6 students)

#### Inclusive Design in HCI (INST704)

Fall 2019

Graduate Teaching Assistant. University of Maryland, College Park (Graduate level, 25 students)

#### **Object-oriented Programming II (CMSC132)**

Spring 2017 Fall 2016

Graduate Teaching Assistant. University of Maryland, College Park

(Undergraduate level, 60 students)

Spring 2015

#### Object-oriented Programming I (CMSC131)

Graduate Teaching Assistant. University of Maryland, College Park (Undergraduate level, 60 students)

Data Structure (CS206) Fall 2012

Graduate Teaching Assistant. Korea Advanced Institute of Science and Technology (Undergraduate level, 30 students)

### **MENTORING**

Ebrima Jarjue. Master student, College of Information Studies

University of Maryland, College Park

Jaina Gandhi. Master student, College of Information Studies

University of Maryland, College Park

Ernest Essuah Mensah. Undergraduate student, Computer Science

University of Maryland, College Park

June Xu. Undergraduate student, Electrical and Computer Engineering

University of Maryland, College Park

### PROFESSIONAL SERVICE

#### **ASSOCIATE CHAIR**

**Assistive Technologies Journal** 

CHI2020 Late Breaking Work

REVIEWER

ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)

ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)

ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)

2020

ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)

2019

IFIP TC.13 International Conference on Human-Computer Interaction (INTERACT)

## PROFESSIONAL AFFILIATION AND MEMBERSHIP

- Member of Association for Computing Machinery (ACM)
- Special Interest Group on Accessibility and Computing (SIGACCESS)
- Special Interest Group on Computer-Human Interaction (SIGCHI)

Fall 2014

2019