JONGGI HONG

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

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EDUCATION

University of Maryland, College Park — September 2014 – September 2021
Doctor of Philosophy, Computer Science — College Park, Maryland, USA

Advisor: Hernisa Kacorri
Committee: Marine Carpuat, Huaishu Peng, Leo Zhicheng Liu, Leah Findlater (University of Washington)
Thesis: Exploring Blind and Sighted Users' Interactions with Error-Prone Speech and Image Recognition

Korea Advanced Institute of Science and Technology — September 2012 – August 2014
Master of Science, Computer Science — Daejeon, South Korea

Advisor: Geehyuk Lee
Committee: Woohun Lee, Poika Isokoski (Tampere University)
Thesis: FlickBoard: A Simple Split Soft Keyboard for Small Touch Screens

Korea Advanced Institute of Science and Technology — February 2006 – December 2011
Bachelor of Science, Computer Science (summa cum laude) — Daejeon, South Korea

PROFESSIONAL EXPERIENCE

Smith-Kettlewell Eye Research Institute. Postdoctoral Fellow — November 2021 – Current
Coughlan Lab — San Francisco, California, USA

Mentor: James Coughlan
Project: Developing a camera-based navigation system for blind users

University of Maryland, College Park. Research Assistant — September 2017 – September 2021
Intelligent Assistive Machines Lab — College Park, Maryland, USA

Advisor: Hernisa Kacorri
Project: Developing an accessible teachable interface of an object recognizer for blind and sighted users

Microsoft Research. Research Intern — June 2020 – September 2020
Ability team, Future of work community — Redmond, WA, USA (Remote)

Mentors: Daniela Massiceti, Edward Cutrell, Cecily Morrison, Saqib Shaikh
Projects: Building an interactive video recording interface for people with visual impairments

Adobe Research. Research Intern — May 2018 – August 2018
Systems Technology Lab — 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: Speech input interface for blind and sighted users, haptic wristbands for directional guidance

TALKS

Generating Accessible Descriptors in Teachable Object Recognizers — UMD HCIL Symposium, 2021

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
Evaluating Angular Accuracy of Wrist-based Haptic Directional Guidance for Hand Movement	UMD HCIL Symposium, 2016
SplitBoard: A Simple Split Soft Keyboard for Wristwatch-sized Touch Screens	UMD HCIL Symposium, 2015

HONORS & AWARDS

HCIL Maryland Way award	May 2021
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.10 **Jonggi Hong**, Jaina Gandhi, Ernest Essuah Mensah, Ebrima Jarjue, Kyungjun Lee, Hernisa Kacorri. 2022. TOR: Developing an Accessible Teachable Object Recognizer with Blind People. *Under review*.

P.9 Kyungjun Lee (co-first author), **Jonggi Hong (co-first author)**, Ebrima Jarjue, Ernest Essuah Mensah, Hernisa Kacorri. 2022. From the Lab to People's Home: Facilitating Access to Blind Participants' Interactions in Remote Studies via Video Conferencing with Smart Glasses. *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: Touch-and-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. *Proceedings of Computer Supported Cooperative Work (CSCW)*.
Impact factor: 6.76

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 UbiComp 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

Tak Yeon Lee, **Jonggi Hong**, Eunyee Koh. Identifying and Presenting Misalignments between Digital Messages and External Digital Content. US Patent App. 16/419,676 — USA, 2020

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
Graduate Teaching Assistant. University of Maryland, College Park Fall 2016
(Undergraduate level, 60 students) Spring 2015

Object-oriented Programming I (CMSC131) Fall 2014
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, Collge Park

Ernest Essuah Mensah. Undergraduate student, Computer Science University of Maryland, Collge Park

June Xu. Undergraduate student, Electrical and Computer Engineering University of Maryland, Collge Park

Jaina Gandhi. Master student, College of Information Studies University of Maryland, Collge Park

Christine Vaing. Master student, College of Information Studies University of Maryland, Collge Park

PROFESSIONAL SERVICE

ASSOCIATE CHAIR

CHI2020 Late Breaking Work 2020

REVIEWER

ACM SIGCHI Conference on Human Factors in Computing Systems (CHI) 2021

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) 2019

Assistive Technologies Journal 2019

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)