

# JONGGI HONG

Assistant Professor, Department of Computer Science, Stevens Institute of Technology

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Hoboken, NJ, USA

<https://jonggi.github.io>

## 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

Stevens Institute of Technology. Assistant Professor

January 2023 – Current

Department of Computer Science

Hoboken, New Jersey, USA

Smith-Kettlewell Eye Research Institute. Postdoctoral Fellow

November 2021 – December 2022

Coughlan Lab

San Francisco, California, USA

Mentor: James Coughlan

Project: Developing a camera-based navigation system for blind 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

## TALKS

Human-Computer Interaction and Artificial Intelligence

SIT Seminar in Computer Science Outcomes, 2023

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

## HONORS & AWARDS

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HCIL Maryland Way award	May 2021
Selected as HCIC 2019 student attendee	June 2019
UbiComp 2018 doctoral consortium	October 2018
Goldhaber 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

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### PEER-REVIEWED PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

- P.11 **Jonggi Hong**, James Coughlan. 2024. Enhancing Walk-Light Detector Usage for the Visually Impaired: A Comparison of VR Exploration and Verbal Instructions. *Proc. International Web for All Conference (W4A 2024)*.  
 🏆 **Best Paper Nominee**  
 Acceptance rate: NA
- P.10 **Jonggi Hong**, Jaina Gandhi, Ernest Essuah Mensah, Farnaz Zeraati, Ebrima Jarjue, Kyungjun Lee, Hernisa Kacorri. 2022. Blind Users Accessing Their Training Images in Teachable Object Recognizers. *Proc. International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2022)*.  
 🏆 **Best Paper Nominee**  
 Acceptance rate: 26.5%
- 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: Lessons from Accessing Blind Participants' Interactions via Smart Glasses in Remote Studies. *Proc. International Web for All Conference (W4A 2022)*.  
 Acceptance rate: NA
- 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 (HCI 2014)*, 109-118. (Best paper awarded)  
Acceptance rate: N/A

## PEER-REVIEWED JOURNAL ARTICLES

- J.5 **Jonggi Hong**, James Coughlan. 2023. VR Training to Facilitate Blind Photography for Navigation. *The Journal on Technology and Persons with Disabilities (CSUN)*.  
Impact factor: 0.82
- 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

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|---|-----------|
| Tak Yeon Lee, <b>Jonggi Hong</b> , Eunye Koh. Identifying and Presenting Misalignments between Digital Messages and External Digital Content. US Patent App. 16/419,676 | USA, 2020 |
| Geehyuk Lee, <b>Jonggi Hong</b> . 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

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<b>Artificial Intelligence (CS541)</b> Instructor. Stevens Institute of Technology (Graduate level, 46 students)	Spring 2023
<b>Seminar in Research Methods and Data Analysis (INST808)</b> Graduate Teaching Assistant. University of Maryland, College Park (Graduate level, 6 students)	Spring 2020
<b>Inclusive Design in HCI (INST704)</b> Graduate Teaching Assistant. University of Maryland, College Park (Graduate level, 25 students)	Fall 2019
<b>Object-oriented Programming II (CMSC132)</b> Graduate Teaching Assistant. University of Maryland, College Park (Undergraduate level, 60 students)	Spring 2017 Fall 2016 Spring 2015
<b>Object-oriented Programming I (CMSC131)</b> Graduate Teaching Assistant. University of Maryland, College Park (Undergraduate level, 60 students)	Fall 2014
<b>Data Structure (CS206)</b> Graduate Teaching Assistant. Korea Advanced Institute of Science and Technology (Undergraduate level, 30 students)	Fall 2012

## MENTORING

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<b>Jiaqi Tu.</b> Master student, Computer Science	Stevens Institute of Technology
<b>Ruobing Liu.</b> Master student, Computer Science	Stevens Institute of Technology
<b>Jiayin Huang.</b> Master student, Computer Science	Stevens Institute of Technology
<b>Kanika Yadav.</b> Master student, Computer Science	Stevens Institute of Technology
<b>Arnab Chand.</b> Master student, Computer Science	Stevens Institute of Technology
<b>Ebrima Jarjue.</b> Master student, College of Information Studies	University of Maryland, Collge Park
<b>Ernest Essuah Mensah.</b> Undergraduate student, Computer Science	University of Maryland, Collge Park
<b>June Xu.</b> Undergraduate student, Electrical and Computer Engineering	University of Maryland, Collge Park
<b>Jaina Gandhi.</b> Master student, College of Information Studies	University of Maryland, Collge Park
<b>Christine Vaing.</b> Master student, College of Information Studies	University of Maryland, Collge Park

## PROFESSIONAL SERVICE

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### WORKSHOP CHAIR

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)	2024
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### UNIVERSITY SERVICE

Search committee	2024
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### PROGRAM COMMITTEE

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)	2023
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### ACCESSIBILITY CHAIR

ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)	2023
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### ASSOCIATE CHAIR

CHI2020 Late Breaking Work	2020
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## REVIEWER

ACM International Conference on Mobile Human-Computer Interaction (MobileHCI)	2023
ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)	2023
ACM Symposium on User Interface Software and Technology (UIST)	2022
W4A'22 Accessibility Challenge	2022
ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)	2024
ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)	2023
ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)	2022
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

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