# **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)

**♀** College 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

Daejeon, 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

Daejeon, South Korea

# PROFESSIONAL EXPERIENCE

**University of Maryland, College Park**. Research Assistant

September 2017 - February 2021 (Expected)

Intelligent Assistive Machines Lab

College Park, Maryland, USA

Advisor: Hernisa Kacorri

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

Microsoft Research. Research Intern

iii June 2020 - September 2020**P** Redmond, WA, USA (Remote)

Ability team, Future of work community

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Mentors: Daniela Massiceti, Edward Cutrell, Cecily Morrison, Saqib 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

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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**

| 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**

| 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 Al 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**

| Tak Yeon Lee, <b>Jonggi Hong</b> , Eunyee 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**

| Seminar in Research Methods and Data Analysis (INST808) Graduate Teaching Assistant. University of Maryland, College Park (Graduate level, 6 students) | Spring 2020                             |
|--|---|
| Inclusive Design in HCI (INST704) Graduate Teaching Assistant. University of Maryland, College Park (Graduate level, 25 students)                      | Fall 2019                               |
| Object-oriented Programming II (CMSC132) Graduate Teaching Assistant. University of Maryland, College Park (Undergraduate level, 60 students)          | Spring 2017<br>Fall 2016<br>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, 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

University of Maryland, Collge Park

### PROFESSIONAL SERVICE

#### **ASSOCIATE CHAIR**

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)

Assistive Technologies Journal

# 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