# Junhan Kong Curriculum Vitæ

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# **BIO**

Junhan "Judy" Kong is completing her second year as a PhD student in the Information School at the University of Washington. She is advised by Prof. Jacob O. Wobbrock and is a member of the ACE Lab and the DUB Group. She obtained her bachelor's and master's degrees in computer science from Carnegie Mellon University with an additional major in human-computer interaction (HCI) and minors in statistics and machine learning. Her area of research is HCI and accessible computing. Her work seeks to understand varying abilities of users and make technologies accessible through ability-based design.

#### **EDUCATION**

University of Washington, Seattle WA

Sep 2020 - Jun 2025 (expected)

Ph.D. in Information Science Advisor: Jacob O. Wobbrock

Carnegie Mellon University, Pittsburgh PA

May 2019 - May 2020

Master of Science in Computer Science

Thesis: An Authoring Tool for Creating Interactive AR User Tutorials by Demonstration

Advisor: Jeffrey P. Bigham

Carnegie Mellon University, Pittsburgh PA

Aug 2015 - May 2019

Bachelor of Science in Computer Science

Additional major in Human-Computer Interaction, minors in Machine Learning and Statistics

## **PUBLICATIONS**

- [6] **Junhan Kong**, Mingyuan Zhong, James Fogarty, Jacob O. Wobbrock. The Ability-Based Design Mobile Toolkit: Developer Support for Runtime Interface Adaptation Based on User Abilities. (*under review for UIST 2022*)
- [5] **Junhan Kong**, Mingyuan Zhong, James Fogarty, Jacob O. Wobbrock. Quantifying Touch: New Metrics for Characterizing What Happens *During* a Touch. (*under review for ASSETS 2022*)
- [4] **Junhan Kong**, Dena Sabha, Jeffrey P. Bigham, Amy Pavel, Anhong Guo. 2021. TutorialLens: Authoring Interactive Augmented Reality Tutorials Through Narration and Demonstration. In Symposium on Spatial User Interaction (SUI '21). Association for Computing Machinery, New York, NY, USA, Article 16, 1–11. https://doi.org/10.1145/3485279.3485289
- [3] **Junhan Kong**, Mingyuan Zhong, James Fogarty, Jacob O. Wobbrock. 2021. New Metrics for Understanding Touch by People with and without Limited Fine Motor Function. In The 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '21 Poster). Association for Computing Machinery, New York, NY, USA, Article 80, 1–4. https://doi.org/10.1145/3441852.3476559

- [2] **Junhan Kong**, Anhong Guo, Jeffrey P. Bigham. 2019. Supporting Older Adults in Using Complex User Interfaces with Augmented Reality. In The 21st International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '19 Demo). Association for Computing Machinery, New York, NY, USA, 661–663. https://doi.org/10.1145/3308561.3354593
- [1] Anhong Guo, **Junhan Kong**, Michael Rivera, Frank F. Xu, Jeffrey P. Bigham. 2019. StateLens: A Reverse Engineering Solution for Making Existing Dynamic Touchscreens Accessible. In Proceedings of the 32nd Annual ACM Symposium on User Interface Software and Technology (UIST '19). Association for Computing Machinery, New York, NY, USA, 371–385. https://doi.org/10.1145/3332165.3347873

# **PATENTS**

Anhong Guo, **Junhan Kong**, Michael Rivera, Frank F. Xu, Jeffrey P. Bigham. StateLens: A Reverse Engineering Solution for Making Existing Dynamic Touchscreens Accessible. U.S. Provisional Patent Application 19/207, filed June 6, 2019.

## **TEACHING**

| Teaching Assistant, UW IMT 575 Data Science III: Scaling, Applications and Ethics | Mar 2022 - Jun 2022 |
|---|---------------------|
| Teaching Assistant, UW IMT 596 & 597 MSIM Capstone                                | Jan 2021 - Jun 2021 |
| Teaching Assistant, UW INSC 380 Information Systems Analysis and Design           | Sep 2020 - Dec 2020 |
| Teaching Assistant, CMU 05-391 Designing Human-Centered Software                  | Aug 2017 - Dec 2019 |
| Teaching Assistant, CMU 15-122 Principles of Imperative Computation               | Aug 2016 - Dec 2019 |

#### SERVICE

| ASSETS 2022 Web and Graphics Design Co-Chair | Sep 2021 - Oct 2022 |
|--|---------------------|
| CHI 2022 Reviewer                            | Oct 2021            |
| CMU BHCI Student Advisory Committee          | Sep 2018 - May 2019 |
| CMU Undergraduate Orientation Counselor      | Aug 2018            |

#### AWARDS AND HONORS

| The Boeing Blue Skies Award: Game Changer                 | May 2019 |
|---|----------|
| CMU University Honors for academic excellence             | May 2019 |
| TartanHacks 2017: Best Educational App                    | Feb 2017 |
| TartanHacks 2016: Social Impact Prize                     | Feb 2016 |
| CMU School of Computer Science Dean's List,               |          |
| Fall 2015, Spring 2017, Fall 2017, Spring 2018, Fall 2018 |          |

# INDUSTRY EXPERIENCE

| Software Engineering Intern, Google                   | May 2018 - Aug 2018 |
|---|---------------------|
| Software Engineering and Data Science Intern, Jet.com | Jun 2017 - Aug 2017 |

#### SKILLS

**Programming Languages**: Python, C++, C, Java, Swift, Objective C, C#, F#, JavaScript, R, SQL **Tools & Platforms**: Git, Unity, ARKit, TensorFlow, AWS, OpenCV, CUDA, OpenMP, Hadoop, Spark **User-Centered Research**: contextual inquiry, heuristic evaluation, affinity diagramming, storyboarding and speed dating, surveys and interviews

Hardware Prototyping & Fabrication: Processing, Arduino, PCB design, 3D printing