# JiWoong (Joon) Jang

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#### RESEARCH AREAS OF INTEREST

Accessibility, Human-Al Interaction, Computer Vision, Machine Learning, Human-Robot Interaction

#### **EDUCATION**

**Carnegie Mellon University - School of Computer Science** 

Pittsburgh, PA

Ph.D. in Human-Computer Interaction

(beginning) 08/2022 - current

B.S. in Artificial Intelligence, Minor in Human-Computer Interaction

05/2022

- Phi Beta Kappa and Senior Leadership Recognition Award

#### **PUBLICATIONS / AWARDS**

Published / Accepted Work (\* - denotes equal contribution)

2022

[S1] "I Should Feel Like I'm In Control": Understanding Expectations, Concerns, and Motivations for the Use of Autonomous Navigation on Wheelchairs

ASSETS 2022

JW Jang, Y. Li, P. Carrington

[C3] Rich Screen Reader Interactions for Accessible Data Visualization

EuroVIS 2022

J. Zong\*, C. Lee\*, A. Lundgard\*, **JW Jang**, D. Hajas, A. Satyanarayan

(Accept Rate: 24%)

- Honorable Mention (Top 5% of accepted submissions)

2021

[C2] Say It All: Feedback for Improving Non-Visual Presentation Accessibility

CHI 2021

Y.H. Peng, JW Jang, J. Bigham, A. Pavel

(Accept Rate: 26%)

[C1] Explorations of Designing Spatial Classroom Analytics with Virtual Prototyping

LAK 2021

JW Jang\*, J. Lee\*, V. Echeverria, L. Lawrence, V. Aleven

(Accept Rate: 31%)

**Awards** 

Phi Beta Kappa Inductee

S2022

Senior Leadership Recognition Award

S2022

University Presidential Scholarship (\$125K 4-Year Academic Scholarship)

F2018 - S2022

Red Robot Hackathon - General Motors Best Robot Award

Oct 2018

### **RESEARCH POSITIONS**

Carnegie Mellon University - AXLE Lab F2021 - Current

Research Assistant with Dr. Patrick Carrington

Massachusetts Institute of Technology - CSAIL Summer 2021

Research Assistant with Dr. Arvind Satyanarayan (MiT Visualization Group)

Carnegie Mellon University - HCII Summer Research Program Summer 2020 - F2020

REU Research Assistant with Dr. Vincent Aleven

Carnegie Mellon University - Big Lab S2020 - F2020

Research Assistant with Drs. Amy Pavel and Jeffrey P. Bigham

#### **RECENT WORK / EXPERIENCE**

Carnegie Mellon University - Human-Computer Interaction Institute F2021

Head Teaching Assistant for 05-499 / 05-899 (Accessibility)

Carnegie Mellon University - School of Computer Science F2019 - S2020

Teaching Assistant for 15-122 (Principles of Imperative Computation)

Carnegie Mellon University - CREATE Lab (EarthTime / Al & Humanity Archive)

Summer 2019

Web Backend / Frontend / Design Intern - Supervised by Dr. Illah Nourbakhsh

**Prior to CMU** 

Ministry of Health and Welfare - Republic of South Korea Jun 2016 - Jul 2018

Special Task Force (Advisory to the Minister on Accessible Technology)

Community Chest of Korea Mar 2013 - May 2016

Team Lead / Social Worker for Deaf and Hard-of-Hearing Causes

## **SERVICE / EXTRACURRICULARS**

SCS4Accessibility, co-Lead + co-Founder F2021 - current

ABLE CMU (Disability Advocacy / Social Awareness Group), VP + Founding Member F2019 - current

Accessibility Research Reading Group (Led/Presented 2 Sessions) S2020 - current

SCS4ALL, Lead Mentor for Under-Upperclassmen Mentorship Program F2018 - current

CMU PRISM (LGBTQ+ Advocacy Group) F2018 - current

#### RELEVANT COURSEWORK

#### **Past Coursework**

AI / ML Computational Photography, Computer Vision, Deep/Reinforcement Learning,

Machine Learning

**HCI** Accessibility, Privacy and Security, Interaction Design, Human-Robot Interaction,

Cognitive Psychology

**CS Fundamentals** Computer Systems, Regression Analysis, Statistical Inference, Probability Theory,

Multivariate Calculus, Linear Algebra, Algorithms Analysis, Imperative/Functional

Programming, Data Structures

#### **SKILLS**

Code Proficient: Python, C, C++, JS/TypeScript, HTML+CSS, SML, LaTeX

Familiar: ROS, Swift, Java, R, Matlab, SQL (learner), Django (learner), OCaml

Software Frameworks OpenCV, Git, PyTorch (learner), TensorFlow (learner), Scikit-learn, Jupyter, R

Packages / Apps Stata, Photoshop, Lightroom, Final Cut Pro X, WordPress

**Languages** English (fluent), Korean (fluent), ASL (beginner), CASE/PSE (beginner)