# Jun Wang

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#### EDUCATION

### University of Washington

Sep. 2021 - Jun. 2024 (Expected)

B.S. in Computer Science (with honors), Advised by Prof. Jon Froehlich

Seattle, WA

GPA: 3.90/4.00 (Top 3.5%)

- Skills: Java, Python, C/C++, MySQL, TypeScript/JavaScript; PyTorch, OpenCV, Git
- Selected Coursework: Deep Learning, Computer Vision, Data Structures, Algorithms, Database System, Probability

#### TECHNICAL EXPERIENCE

# Makeability Lab (Planning submission to CHI 2024)

Nov. 2022 - Present

Undergraduate Researcher

Seattle, WA

- Designed and evaluated a context-aware multimodal voice assistant for pronoun disambiguation in wearable AR, and presented at UW's annual undergraduate research symposium.
- Brainstormed technical solutions for multimodal integration and constructed user study scenarios.
- Identified commonly used ambiguous phrases in human-to-human speech through literature review.
- Trained MobileNetV3 and SqueezeNet models on custom dataset to track tennis balls in first-person POV recordings.

# AI Alignment at UW

Apr. 2023 - Jun. 2023

 $Under graduate\ Researcher$ 

Seattle, WA

- Focused on extensions to, applications of, and analysis of the paper "Discovering Latent Knowledge in Language Models Without Supervision".
- Explored questions such as "How does the language model's output change depending on the simulacra/paraphrase" and "Does the language model condition its world model on some counterfactuals written in the text".

# Advanced Robotics at UW (2022 RoboMaster NA Champions)

Jan. 2022 – Jan. 2023 Seattle, WA

Software Engineer

— Implemented message loggings for referee data (competition result, real-time data, robot id, warning).

- Parsed depth camera data from RealSense camera to compute the 3D position of each target plate relative to the camera.
- Evaluated competition requirements and collaborated across subteams to plan an end-to-end system.

#### HD Education

Dec. 2021 – Jun. 2022

 $Computer\ Science\ Tutor$ 

Remote

- Prepared and taught weekly lessons ( $\sim$ 2 hours) about procedural programming concepts, basic control structures, and fundamental data structures in Java to a class of  $\sim$ 20 people.

#### Stanford University

Oct. 2019 – Feb. 2020

Research Assistant

Remote

- Assisted in the research project entitled "Personalized Recommender Systems: From Collaborative Filtering to Deep Learning" by developing algorithms for recommender systems (e.g., collaborative filtering, matrix factorization, DNN).

## **PROJECTS**

## Swift and Smart: A New Paradigm for Real-Time Garbage Segmentation Apr. 2023 – Jun. 2023

- Proposed a real-time semantic segmentation solution featuring automatic image annotations with Segment Anything Model and Grounding DINO object detector and model trainings with MobileNetV3, DeepLabv3, and ResNet50 models.
- Best model combining MobileNetV3 and DeepLabv3 models attained an MIoU score of 0.7865 and outperforms the baseline model (ResNet50 + FCN) regarding average precision (0.8112), recall (0.8147), and FPS (218.93).
- Validated the viability of real-time garbage segmentation using models that balance computational efficiency and accuracy and discussed current limitations and future works.

#### Campus Map

Jul. 2022 – Aug. 2022

- Utilizes Dijkstra's algorithm to find the shortest path between two buildings on campus.
- Made with model-view-controller pattern consisting of various modular components with a thorough test suite, including: generic graph class, generic campus map class, back-end java spark server, front-end React components.

# LEADERSHIP & VOLUNTEERING EXPERIENCE

#### Meta Above & Beyond Computer Science (ABCS) Program

Aug. 2022 - Oct. 2022

- Collaborated with peers and Meta software engineers in a 10-week workshop series to enhance coding interview skills.

#### TechTogether Seattle

Jun. 2022 - Aug. 2022

- Brainstormed coding challenges and workshops for a hackathon targeting gender-marginalized groups ( $\sim$ 500 people) and recruited  $\sim$ 50 volunteers, mentors, and judges.

#### Wuhan Cubing Association

May 2015 – Jul. 2020

- Organized monthly in-person meetings and local speed-cubing competitions for 500+ participants.