Yi Wu Email: ywu676@wisc.edu Mobile: +1-309-703-6663

### EDUCATION

University of Wisconsin-Madison

Madison, Wisconsin

Bachelor of Computer Science (transfer from HKUST)

September 2022 - May 2024 (expected)

University of Illinois Urbana-Champaign(UIUC)

HKUST Engineering Exchange Program(Computer Science); GPA: 3.91/4.0

Urbana, Illinois

Jan 2022 - May 2022

Hong Kong University of Science and Technology(HKUST)

B.Sc. of Computer Science and Mathematics (Applied Math); GPA: 3.716/4.3(top 10%)

NT, Hong Kong SAR Sep 2019 - Jun 2022

Courses

• Object-Oriented Programming and Data Structures, Machine Organization, Java Programming

• Honors Design and Analysis of Algorithms, Honors Probability, Honors Linear Algebra, Calculus

• Special Topics: Intro to Machine Perception, Communication Networks, Intro to Optimization

## SKILLS SUMMARY

• Programming Languages: Python, C++, JAVA

• Programming Topics: Network, Data Structures, Machine Learning, Human Comuter Interactions

• Frameworks/Libraries: Sklearn, Pandas, PyTorch, NumPy, OpenCV, Open3d

English(Proficient), Chinese(Native) • Languages:

# Selected Projects

- Game with GUI Mode in JAVA FX: Using JAVA FX to construct a game with interactive Graphic UI that shows the covid cases in the game's city. Tech: JAVA, JAVA FX
- A TCP Protocol Implementation based on UDP: Use only UDP protocol to construct a TCP protocol that can tolerate packet drops, allow other concurrent connections a fair chance. The protocol is tested to be reliable within the virtual machine environment. Tech: C/C++
- Iterative Closest Point and Odometry: Construct a point cloud alignment and depth odometry algorithm to estimate camera poses and build 3D maps of the environment through raw depth observation. Tech: Python, Open3D, NumPy
- 3D Multi Object Tracking: Implementing a Kalman Filter to match the objects detected by the object detector in the current frame to the objects are already tracking from the previous frames. Tech: Python

- Research Assistant(HKUST): Actively participate in the Analysis and text mining on happiness moments from HappyDB; Design user interfaces and take survey for tested users for the Happiness activity relation mining system. Tech: Python, Pandas (May 2021)
- Research Assistant (HKUST): Build three state of the art deep learning models on super resolution for OCR, experimented and evaluated their performances on new data collected from web; Automated screenshot process on Wikipedia random page for data preparation with Python. Tech: Python, PyTorch (Jun 2021 - Aug 2021)
- Researh Assistant (UIUC): Clean thousands of human crop tillage images and labels to collect the label with high confidence. Use PyTorch to train deep learning models to classify the tillage condition of the images of crop fields. Analyze the training results and give suggestions on future label choices. Tech: GeoPandas, Pandas, PyTorch (Jun 2022 - Aug 2022)

# Honors and Awards

- Dean's List, 2019
- University's Scheme for Continuing Undergraduates(top 10% students), 2020-2021, 2021-2022

# Volunteer/Extra Curriculum Experience

General Secretary at Chinese Folk Art Society(CFAS), HKUST Student Union NT, Hong Kong SAR Actively involved in web game development and activity organization for 500+ members of CFAS Jan 2019 - Present