Qianxi Kong

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EDUCATION

Carnegie Mellon University (CMU) Pittsburgh, PA

Master of Science in Artificial Intelligence Engineering – Mechanical Engineering Dec 2024

- GPA: 3.8/4.0
- Coursework: Machine Learning AI for Engineer, Systems Tool Chain AI, Intro to Deep Learning, Intermediate Deep Learning for Engineer, Machine Learning AI Project, Simultaneous Localization and Mapping, Robot Dynamics Analysis

University of Illinois at Urbana-Champaign (UIUC) Champaign, IL

Bachelor of Science in Engineering Mechanics, Minor in Mathematics May 2023

- GPA: 3.52/4.0
- Computational Science and Engineering Certificate
- Coursework: Finite Element Analysis, Numerical Analysis, Computer Aided Design

INTERNSHIP

SAIC Motor Corporation Shanghai, China

Engineering Intern Jun 2023 – Aug 2023

- Contributed to the Smart Port initiative by focusing on the development and training of an AI model for the accurate counting and identification of trucks and cars, achieving an impressive accuracy rate of approximately 95%.
- Accomplished the identification of standing and falling pedestrians by using Ground Truth Labeler for annotating point cloud data obtained from Lidar sensors
- Conducted comprehensive market research on AI chips, analyzing performance, cost, compatibility, and energy efficiency to compile an exhaustive market research report.

EXPERIENCE

Intelligent Motion Laboratory Champaign, IL

Research Assistant Jun 2022 – May 2023

- Designed and manufactured multiple features of the Tele-Robotic Intelligent Nursing Assistant, including CAD model of the three-degrees-of-freedom head, the parallel jaw fingers, the mount of face cameras, screens, and exhaust fans
- Proposed and manufactured an aesthetically pleasing shell design for the Tele-Robotic Intelligent Nursing Assistant
- Developed circuits for controlling the movements of eyes via linear actuator and Arduino
- Won fourth place in terms of the tasks accomplished in the ANA XPRIZE Robotics Competition

ACADEMIC PROJECTS

ORB-SLAM3 &YOLOv8 Integration Carnegie Mellon University Mar 2024

- Developed and optimized algorithms for combining visual SLAM with real-time object detection, focusing on dynamic environments where traditional SLAM systems falter.
- Utilized public software and libraries, including ORB-SLAM3 for visual SLAM and YOLOv8 for object detection and semantic segmentation, to create a more robust navigation system.

Plant Disease Identification Carnegie Mellon University Jan 2024

- Led the team to identify plant diseases using Convolutional Neural Networks (CNN), integrating with YOLOv8 for real-time image capture via webcam, thereby advancing agricultural diagnostics.
- Designed and implemented a CNN model, coupled with YOLOv8, to accurately detect and classify various plant diseases in real-time, enhancing the speed and reliability of disease diagnosis in crops.

SKILLS

Programming Language

- Python, SQL, C++

Technologies/Frameworks

- SolidWorks, MATLAB, Arduino, Pytorch, Kubernetes, Docker, TensorFlow, NumPy, SciPy, Scikit-learn, Pandas, Matplotlib, Seaborn, XGBoost, Keras

PERSONAL PORTFOILO

- **https://qianxik.github.io/Personal-Portfolio/**