Dingyuan Huang

• Address:1900SW 13th ST, GNV ,FL • Mobile:+(1) 725 285 7273 • Email:dingyuanhuang@ufl.edu

ACADEMIC BACKGROUND

University of Florida
Ph.D. in Civil and Coastal Engineering *01/2026 – present*
University of Florida
MS in Computer Science *01/2026 – present*
University of Florida
MS in Electrical and Computer Engineering *08/2024 – 12/2025*
Central South University
BE in Mechanical Manufacture and Automation *09/2019 – 06/2023*

COMPUTER SKILLS

- Python, PLC, AutoCAD, SolidWorks, Proteus, MATLAB, Labview, MasterCAM, Swansoft CNC Simulator, Altium Designer, Blender, C Language, Revit.

RESEARCH EXPERIENCE

Object Recognition Based on Convolutional Neural Network

Team leader, supervised by Prof. Alex Rogers at the University of Oxford *02 – 05/2023*

- Organized and led group members to complete the group tasks of garbage recognition and classification, and was responsible for labeling targets in the database as well as training and improving the object recognition model.
- Improved the recognition accuracy of brain tumors by personally training a convolutional neural network with two convolutional layers based on a Keras classification model.
- Authored the academic paper on the brain tumor classification model independently, which was adopted by the 5th International Conference on Computing and Data Science (CONF-CDS 2023).

Smart Factories & Industry 4.0

Group member, supervised by Prof. Alexander Mertens at the RWTH Aachen University *07 – 08/2022*

- Participated in a research course at RWTH Aachen University, collaboratively designed a smart factory layout, and finalized the control interface for a mobile robot with team members.
- Completed the pipeline design for conveying, processing, and taking out materials based on the CNC milling machine module, and implemented it on the "ys-jcpt-i" robot basic training platform.
- Accomplished PLC programming and executed the material milling procedure.

PROFESSIONAL TRAINING EXPERIENCE

DreamX Lab in Herbert Wertheim College of Engineering, UF GNV, FL, US

Research Assistant *04/2025 - present*

- Built a mobile integrated robotic workstation based on a UR5 robotic arm, enabling modular and relocatable automation for precision manipulation and smart manufacturing tasks.
- Developed Python- and ROS-based control interfaces for motion planning, object grasping, and teleoperation, integrating Robotiq 2F-85 gripper and tactile/force sensors for real-time feedback and dataset collection.

Anhui Guoxuan New Energy Automobile Technology Co., LTD Hefei, Anhui, China

Intern *03 - 05/2024*

- Assisted senior engineers in completing the circuit design and optimization of the BMS control board based on AutoCAD, completed component selection, and was mainly responsible for checking circuits and annotations.
- Collected data on batteries under different working conditions and used Matlab for data analysis and model simulation. Established a mathematical model of battery performance and simulated battery behavior under various loads, providing references for optimizing BMS control strategies.
- Collaborated with mechanical engineers to design and implement the BMS structure and thermal solutions, participated in project progress meetings, and reported on work progress.