Roy Huang

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Summary

Full-Stack Developer with a strong foundation in hardware, software, and data science. Skilled in building intelligent applications using modern **Al/ML** and full-stack technologies. Experienced in research, collaboration, and end-to-end product development. Check out my projects on **GitHub** and connect with me on **LinkedIn**!

U.S. permanent resident - no sponsorship required.

Education

University of Iowa - MS, Electrical & Computer Engineering

- GPA: 3.80/4.0

University of Iowa - BS, Electrical & Computer Engineering

- GPA: 3.51/4.0

Dec. 2024

Dec. 2023

Technical Skills

Programming Languages: Python, JavaScript, Java, C++, SQL, R **Full-Stack:** Node.js, React.js, Flask, PostgreSQL, Docker, Git, Linux **Al/ML:** PyTorch, TensorFlow, OpenCV, Scikit-learn, Pandas, NumPy

Experience

Research Assistant - UT Southwestern & University of Iowa

Sep. 2024 - Mar. 2025

- Developed AI models (CNN, ViT, GANs) that improve early detection of retinal diseases
- Created software tools for data visualization, model training, and performance evaluation
- Collaborated with ophthalmologists to validate AI models and improve patient outcomes
- Published research papers in top-tier AI/ML conferences and journals

Teaching Assistant - University of Iowa

Jan. 2023 - May 2024

- Led discussion sections for 200+ students, simplifying complex concepts for effective learning
- Designed and graded exams, projects, and assignments, ensuring fair and consistent evaluation
- Empowered students to succeed by providing personalized guidance and mentorship

Network Engineer Intern - Casey's General Store

May 2023 - Aug. 2023

- Analyzed network data for 2,500+ stores using Python, optimizing store connectivity
- Directed network upgrades for 40+ stores, communicating with store managers and IT teams
- Created network diagrams and installation guides, ensuring easy deployment and maintenance

Product Developer Intern - Beijing OlymBall Tech. Dev. Co.

May 2022 - Aug. 2022

- Designed core game mechanics that blended strategy and accessibility for a new board game.
- Translated promotional and technical materials into English for international distribution.
- Installed interactive game tables for a retirement community in Onalaska, WI.
- Led in-person coaching sessions with U.S. clients to improve user experience and satisfaction.