

# Roy Huang

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## SUMMARY

Product-minded **Full-Stack Developer** with a strong foundation in hardware, software, and data science. Skilled in building **AI/ML**-powered applications. Highly motivated **Self-Starter** who gets things done.

**U.S. permanent resident** - no sponsorship required.

## EDUCATION

**University of Iowa - MS, Electrical & Computer Engineering** **Dec. 2024**

- GPA: 3.80/4.0

**University of Iowa - BS, Electrical & Computer Engineering** **Dec. 2023**

- GPA: 3.51/4.0

## SKILLS

**Programming Languages:** Python, JavaScript, Java, C++, Assembly, SQL, R

**Full-Stack:** React.js, Node.js, Express, Django, Spring Boot, PostgreSQL, MongoDB, Docker, Git, Linux

**AI/ML:** PyTorch, TensorFlow, OpenCV, Scikit-learn, Pandas, NumPy

**Fully Bilingual:** Mandarin Chinese, English

## EXPERIENCE

**Professional Development - Freelance** **Apr. 2025 - Present**

- Practicing technical interviews and algorithm challenges in JavaScript, Python, and Java
- Learning React, Django, Spring Boot through online courses and reading technical books
- Developing full-stack projects to reinforce new concepts and turn ideas into functional products

**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

**Student Worker - University of Iowa** **Aug. 2020 - Aug. 2024**

- Teaching Assistant (1.5 yrs): Led discussion sections for 200+ students and performed TA duties
- Network Technician (1.5 yrs): Maintained network infrastructure across 300+ campus buildings
- DEI Event Planner (1.5 yrs): Coordinated 10+ campus events for 2000+ engineering students

**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

**Software Engineer Intern - Beijing OlymBall Tech. Dev. Co.** **May 2022 - Aug. 2022**

- Built company website and interactive game demo to support marketing and user engagement
- Designed accessible, strategy-based game mechanics and contributed to product development
- Supported U.S. expansion through client coaching, material translation, and device installation