# **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 **Al/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**

## 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

## IT Technician - University of Iowa

Feb. 2022 - Aug. 2024

- Managed IT inventory operations including procurement, tracking, and delivery logistics
- Maintained network infrastructure across 300+ campus buildings through signal survey
- Performed preventive maintenance on fire protection and safety systems for all 11 dorms

## **Teaching Assistant - University of Iowa**

Jan. 2023 - May 2024

- TA for: High Performance Computer Architecture, Communication Networks, Linear Systems I
- Led discussion sections for 200+ students, translating complex concepts into clear explanations
- Empowered students to succeed academically with personalized mentoring and leaning support

# **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