

Roy Huang

707 N Linn St.
Iowa City, IA 52245

[linkedin.com/in/royhuang11](https://www.linkedin.com/in/royhuang11)

(608) 397-7178
ruoqiu-huang@uiowa.edu

WORK EXPERIENCE

Network Engineering Intern

May 2023 – Aug. 2023

Casey's General Store

Ankeny, IA

- Assisted store & corporate network infrastructure engineering team, troubleshoot fiber malfunction, calculated subnet sizes, analyzed network data with python scripts, created network architecture diagrams
- Coordinated routers/firewalls store upgrade project, communicated across different teams, learned to use Cisco-Meraki dashboard, wrote installation instructions, boxed and shipped out routers to stores
- Shadowed store-software team in sprint meeting and daily scrum meeting, familiarized with Agile development methodology
- Shadowed supply chain IT team, walked through the entire product distribution process, familiarized with supply chain software and IoT devices (e.g. Softeon, Zebra)
- Familiarized with technologies in retailing business such as in-store devices, remote support software, cloud services, and APIs

Teaching Assistant

Jan. 2023 – Present

UIOWA College of Engineering

Iowa City, IA

- 2023 Spring - ECE:2400 Linear Systems I
- 2023 Fall - ECE:3540 Communication Networks
- Led discussion sections, reviewed course material and gave help on projects (e.g. MATLAB)
- Graded homework assignments and held office hours
- Designed Client-Server application protocol project for ECE:3540, hosted oral exam hours

Network Technician

Feb. 2022 – May 2023

UIOWA Information Technology Services

Iowa City, IA

- Led laundry system upgrade project that generates \$1,000,000 revenue per year, installed Raspberry Pi to machines and linked to online App
- Surveyed 300+ campus facilities for Wi-Fi signal, health, and identified existing AP locations and mounting types, using Ekahau Apps and devices, performed location calibration for 500+ access points
- Managed inventory, organized Ethernet fiber optic cables, updated documentations

Inclusion Agent (DEI Event Planning)

Aug. 2020 – Feb. 2022

UIOWA College of Engineering

Iowa City, IA

- Designed and implemented diversity, equity, and inclusion (DEI) workshops, events, and programs for 2000+ engineering students, fostered a sense of belonging for students
- Hosted MESA tutoring program that mentored 5th-12th graders to develop good study habits

Product Developer / Business Partner

Jul. 2014 – Present

Beijing Olymball Technology Development Co. Ltd

Beijing, China

- Created basic game rules for patented sports equipment, demonstrated and taught game rules to customers
- Drafted rulebooks, investment proposal, and business plans, including software game development and marketing strategies, translated documents from Chinese to English
- Manufactured products with hand tools and power tools, installed multiple equipment sets at various locations in China and USA

EDUCATION

The University of Iowa, Iowa City, IA

Anticipated Graduation: Dec 2024

Joint BS/MS in Electrical and Computer Engineering

GPA: 3.50 / 4.0

- Focus: Computer Breadth (BS) / Software Engineering & Machine Learning (MS)
- Minor: Computer Science and Music
- Course Highlights: Machine Learning, Software Engineering Language and Tools, Modern Databases, Internet of Things, High Performance Computer Architecture

SKILLS

Programming/Database: Java, Python, Ruby, C++, PostgreSQL, MongoDB, Neo4J

Technical: Git/GitHub (<https://github.com/RoyH11>), SaaS Applications, Databases, Embedded Systems

Language: Chinese-Mandarin (Native), English (Bilingual), Spanish (Novice)

Hobbies: Piano, Badminton, Reading, Learning Spanish

ENGINEERING PROJECTS

Online Shopping Platform

2023 Fall

Software Engineering Language and Tools

- Creating an online shopping platform SaaS application (Ruby on Rails)
- Working with 4 other teammates, employing an agile development methodology (SCRUM)
- Check out the repository at <https://github.com/uiowahjmjohnsonselt2023/gregslist-market>

HoloLens XR Software / Team Members' Portfolio Webpages

2022 Fall – 2023 Spring

Senior Design Capstone Project

- Created educational circuit building simulator XR game with 3 teammates, supervised by Xyro LLC.
- Designed game mechanism on Unity game engine and pushed APP to HoloLens (C#, Unity)
- Presented product at senior design open house, created poster and product introduction video
- Created team portfolio webpages (<https://github.com/nan-bread-team5/nan-bread-team5.github.io>)

Bank Account Application

2022 Fall

Intro to Software Design Class

- Built currency exchange/bank account software and designed graphic user interface (Java, MongoDB Atlas)
- Applied polymorphism and Client/Server network in software design, experimented with multithreading, wrote JUnit code for testing, used GitLab for version control

Vehicle Parking Sensor

2022 Spring

Embedded Systems Class

- Designed system architecture for prototype of car parking sensor (Sonic Distance Sensor, Arduino)
- Wrote embedded system code to detect distance and display on LCD screen (C, AVR Assembly)
- Constructed alerting functionality such as warning speaker and flashing LED signal

LEADERSHIP & INVOLVEMENT

Dog Trainer, Iowa City Animal Shelter

Jan. 2023 – Present

Piano Performer, Music Minor

Dec. 2021 – Present

Student Leader, Student Engagement Lunch with **President Barbara Wilson**

2023 Spring

MESA Tutor, UIOWA College of Engineering

2020 – 2022

Construction Worker, Habitat for Humanity, Rice County, MN

2020 Summer

Fundraiser, UIOWA Children's Hospital

2019 Fall & Winter