Yvan Chu

+1 617-230-0023 | yvan@u.northwestern.edu | yvanchu.me/resume

EDUCATION

Northwestern University | Evanston, Illinois

Expected Jun 2023

Bachelor of Science in **Computer Science** | Minor in **Data Science & Engineering** | **Cumulative GPA: 3.94 /4.00 Awards:** 1st Place Northwestern Garage Launch Incubator, QuestBridge Scholar, APIA/Wells Fargo Scholar Algorithms, Data Structures, Web Development, React, Probability, Statistics, AI, Optimization

SKILLS

Programming: Python, JavaScript, C++, MATLAB, R, HTML5, CSS, SASS, XOJO

Technologies: React JS, React Native, Node JS, Rest API, SocketIO, MongoDB, Git, Figma, Kanban board

Language: Fluent in Mandarin

EXPERIENCE

EZClinic | Remote

Jun 2021 — Aug 2021

Frontend Development Intern

- Developed cross-platform native application that video streams and alerts nurses of ICU patient conditions
- Designed and implemented UI/UX prototypes in Figma after researching ICU emergency workflow
- Maintained detailed documentation with accessible instructions for future user testing and development

WhaleTeq | Taipei, Taiwan

Jun 2020 — Sep 2020

Product Marketing Intern

- Scripted, recorded, and produced 10 product marketing videos for ECG hardware and software test solutions
- Analyzed digital marketing strategy for the launch of SECG 5.0 AIO and UDI Management System
- Pitched user experience and interface design to Product Management for a handheld hospital ECG simulator

PROJECTS

Sushi Go Digital

Mar 2021 — Present

Full Stack Development (Express, ReactJS, NodeJS)

- Implemented web app for Sushi Go, a multiplayer card switching game, using React class components
- Created Game and Player class to process player-to-player and player-to-table card swapping game mechanics

Bi-Directional Tactile Navigation Glove

Jan 2021 — Present

Hardware Implementation and Arduino Library/API (C++)

- Built a 5-vibration motor wearable for blind or low vision users as a cardinal navigation interface
- Developed an Arduino library to control the vibration motors independently with variable frequency and patterns
- Won 1st place out of 20 teams and secured \$1,000 in funding through Taipei Medical University's Startup Contest

Marmon Hardware Hackathon: Sandwich Assembly Guidance System | Chicago, IL

Feb 2020

- Electronics Design (C/C++)
- Built camera-based progress tracking system with LED indication to increase accuracy for sandwich makers
- Won Innovation Award for the implementation through Pixy camera tracking and low switching costs

$\textbf{Underwater Remotely Operated Vehicles (ROV)} \mid \texttt{Tamuning}, \texttt{GU}$

Aug 2016 — Apr 2019

- Project Manager
- Headed 2 teams of 5 to build remote controlled camera-enabled robot with manual hydraulic claw manipulators
- Taught underclassmen to solder and waterproof electronic components and assemble buoyancy neutral frames
- Won 1st, 3rd, and 4th in MATE ROV Regional Competition in Navigator Class. Attended World Championship

LEADERSHIP

Northwestern University | Evanston, IL

Sep 2020 — Present

Senior Tutor- Engineering Analysis, Discrete Math

- Hosted weekly office hours to clarify concepts, reviewed code, and answered questions with 10-12 students
- Train 10+ new Engineering Analysis tutors and check in weekly to gather feedback and provide support
- Create rubric and grade discrete math homework solutions for 100+ students

Ayers Residential College of Commerce and Industry (CCI) | Evanston, IL

Apr 2020 — Apr 2021

Vice President

- Coordinated project planning protocol and restructured committees to ensure smooth internal operations
- Moderated executive board meetings to manage team dynamic and discussion productivity
- Communicated with 100+ residents and faculty fellows to understand any concerns relating to residential life