UBC Science Co-op



T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

Li Ye (Eric) Fan

Year 2, Combined Major in Computer Science and Biology ericlyfan@gmail.com | (604) 993-1919 | linkedin.com/in/ericlyfan | github.com/ericlyfan

TECHNICAL SKILLS

Programming: Python, Java, C/C++, HTML, CSS, JavaScript*

* Currently Acquiring

Tools/Environment: IntelliJ, Visual Studio Code, GitHub

Testing: JUnit

TECHNICAL PROJECTS

Mental Health AI Chatbot February 2024

- Constructed a retrieval-based AI chatbot in Python that is capable of conversing with users to provide immediate guidance and support regarding general mental health queries
- Utilized Natural Language Processing techniques from Python's Natural Language Toolkit (NLTK) for user input processing, performing tasks such as tokenization, stemming and the creation of a bag-of-words model to convert text data into a numerical form that the neural network can process
- Employed the PyTorch library to create a feedforward neural network consisting of two hidden layers and Rectified Linear Unit (ReLU) activation functions for efficient input pattern recognition and intent classification from the training dataset
- Curated and enhanced a JSON dataset with diverse mental health scenarios, optimizing the chatbot's response retrieval accuracy with a SoftMax function

Technologies: Python, NLTK, PyTorch

Photography Portfolio Website

January 2024 – February 2024

- Developed and deployed a personal photography portfolio website to showcase a digital collection of my travel photography along with a personal description of my experiences as a developer
- Designed the website to be organized, minimalistic and intuitive by utilizing HTML to structuring the content, CSS for styling and layout, along with JavaScript for dynamic features and interactions
- Implemented a CSS media queries to ensure the structure and appearance of the website is maintained across all types of devices, facilitating seamless access and user experience to the content
- Utilized JavaScript to enable interactive features such as a toggleable navigation menu, animated text effects, and responsive photo galleries allowing the user to expand images for a more immersive view

Technologies: HTML, CSS, JavaScript

Restaurant Tracker/Recommendation Project

September 2023 – January 2024

- Designed and developed a Java application for food enthusiasts to rate and store previously visited restaurants for future recommendations by utilizing object-oriented programming skills
- Integrated JSON for data persistence to ensure that the user's personal restaurant collection can be reliably stored and retrieved
- Employed key design patterns such as the Singleton in the development of an event logging system, enhancing the program's future troubleshooting and debugging capabilities
- Transitioned the application from an initial console-based interface to an enhanced, user-centric graphical interface with Java Swing, significantly improving user-interactions and intuitiveness

Technologies: Java, JSON, JUnit Testing

WORK EXPERIENCE

Administrative Assistant – SOUND idEARS Audiology Clinic

March 2022 - Present

- Manage logistics with 8 different global manufacturers to coordinate the timely delivery of hearing aids and oversee the clinic-wide shipping system to ensure organized tracking of 1500+ shipments
- Trained new employees on company policies, procedures and hearing aid preparation techniques, enhancing team efficiency and knowledge
- Addressed production-related and coordinated with our audiologist to maintain high service standards, while also updating the clinic's WordPress website for improved user experience
- Provide personalized patient support, handling Bluetooth paring requests, troubleshooting, and appointment related queries by quickly problem-solving and compromising to find a suitable solution
- Consistently provided exceptional patient care and customer service, leading to positive patient feedback and referrals

Supervisor – Xing Fu Tang (Bubble Tea House)

May 2019 - October 2019

- Trained and supervised baristas and kitchen staff while ensuring they maintain high service standards
- Collaborated with team members to complete a high volume of orders in high-pressure environments
- Independently opened and closed the store, following strict health and safety procedures effectively
- Responsible for kitchen management including the process of cooking tapioca pearls while contributing to the creation of drinks and desserts

COMMUNITY CONTRIBUTIONS

Vice President of Finance – UBC Biological Sciences Society

September 2022 - Present

- Lead planning and development of career-building workshop and academically informative sessions to provide guidance, reassurance, and support to fellow peers
- Developed and implemented a Qualtrics form that significantly streamlined and accelerated the reimbursement process
- Collaborate with other science societies and clubs to develop and run numerous unique and inclusive successful social events
- Involvement with the current development of a BIOSOC scholarship to provide financial aid for students

Database & Outreach Executive – New Chapters Foundation

June 2022 - May 2023

- Collaborated with a partner through extensive research to construct an elaborate database consisting of 50+ mental health resources in Vancouver for homeless individuals
- Established and maintained contact with supportive organizations and small businesses regarding potential promotions and sponsorships
- Initiated partnership with a local shelter, organized meetings with management and worked closely to fine tune details of our inaugural event

EDUCATION

Bachelor of Science - University of British Columbia, Vancouver

Expected Graduation, May 2026

- Specialization: Combined Major in Computer Science and Biology, 2nd year
- Notable Coursework: Software Construction analyzing robust software design, debugging, and testing techniques. Algorithms and Data Structure emphasizing efficiency in key data structures and its application in software development. Computer Systems covering software architecture, operating systems, hardware-software interaction, and network principles, Biostatistics processing data using advanced statistical tests, estimation, regression analysis, and computational data analysis.