Vivian Li

51 Greenleaf ave, Medford MA 02155

☎ +1 781 498 9920 | ✉ vivianliyike@gmail.com | ⌨ github.com/YikeLi-Vivi | in linkedin.com/in/vivian-li-yike/

Education

Tufts University   **GPA: 3.99**   *Medford, MA, USA*

Majors: Computer Science, Cognitive and Brain Science   *Septemper 2020 - May 2024*

Courses: Software Engineering, Simple Virtual Machine, Internet-Scale Distributed System, Compiler, Machine Structure and Assembly Language, Algorithm, Programming Language, Data Structure, Web Programming, Machine Learning, Computational Models in Cognitive Science

Experience

Sonos Inc   *Boston, MA, USA*

Software Engineer Intern   *June 2023 - Aug 2023*

- Acquired proficiency in Kotlin, Compose Multi-platform, and Android development.
- Designed architecture for a Compose Desktop application using MVVM pattern and SOLID principle.
- Built a fully functional app to set up Sonos speakers and control synchronized playback among multiple speakers.

Tufts University Human Interaction Lab   *Medford, MA, USA*

Lab Research Intern   *June 2022 - June 2023*

- Worked as a core developer in a desktop application for conversation analysis.
- Led the development team from project inception to beta package release. Acquired project funds from Sage Ocean grant.
- Provided architect design to new lab interns on new app features after beta release.

Tufts University Computer Science Department   *Medford, MA, USA*

Teaching Assistant   *January 2022 - current*

- Hold office hours and graded students' projects for Programming Language and Web Development Course.
- Lead weekly recitation to help students reinforce concepts in the Programming Language course through hands-on practice.

Tufts University International Center   *Medford, MA, USA*

Web Design Assistant   *June 2022 - December 2022*

- Restructured and Implemented website for international center service.
- Collected and integrated user feedback during the staff meeting.

Projects

Simple Virtual Machine and Universal Forward Translator

C, Standard ML   *January 2023 - May 2022*

- Implemented a multi-pass compiler for a scheme-like language and a virtual machine that accepts the compiled machine code.
- Completed core language features including high order function, closure conversion, automatic currying, and exception handling.

GailBot

Python, PyQt, Jamf Composer, PyInstaller, Pytest   *September 2022 - September 2023*

- Designed and built an audio analysis pipeline with configurable speech-to-text engine settings and plugins.
- Created a desktop interface and released the app package to around 15 conversation analysts for beta testing.

N-Queen Solver

Kotlin, Compose Multi-platform, Gradle   *September 2023*

- Built a desktop teaching tool to present the algorithmic steps of solving the N-Queens problem.
- Helped students understand the use of continuation passing style in backtracking problems with visual animation.

Convex Hull Simulator

p5.js, Typescript, React.js   *January 2023*

- Created an interactive simulator to display the steps of solving the Convex Hull problem with four different algorithms.

Dream

React Native, Node.js, TypeScript, MongoDB   *June 2022 - August 2022*

- Participated in a team project to develop a Mobile App used for dream recording.
- Implemented a user account system and a dream recording calendar.

Skills

Programming	Kotlin, C/C++, Java, Python, JavaScript, Typescript, Standard ML, Ocaml, Shell Script, CSS, HTML
Framework and Technologies	Jetpack Compose, React Js/React Native, Node.js, Express, Flask, PyQt, MongoDB, Git
Software	Figma, Photoshop, Final Cut Pro