Kyle Lai

kylelai.me | 718.309.6432
github.com/kyle-lai-01 | KL655@cornell.edu | linkedin.com/in/klai01

EDUCATION

CORNELL UNIVERSITY
BS in Computer Science
May 2023 | Ithaca, NY
College of Engineering
Dean's List
Cum. GPA: 3.76 / 4.0

TOWNSEND HARRIS HS
NYS Regents Diploma, Honors
June 2019 | Queens, NY
Cum. GPA: 98.55 / 100

SKILLS

TECHNICAL
Proficient:
Java • OCaml • React/Redux
JavaScript ES6 • HTML5 • CSS3
Git • Linux • Microsoft Office Suite
Familiar:
Python • Flask • Bootstrap

SOFT
Teamwork • Communication
Leadership • Research

COURSEWORK

CS 2110 OOP and Data Structures
CS 2850 Networks
CS 3110 Functional Programming
CS 4820 Analysis of Algorithms
MATH 1920 Multivariable Calculus
MATH 2940 Linear Algebra
ECE 2300 Digital Logic and Computer
Organization

ADDITIONAL INFO

Languages
Native in English
Fluent in Cantonese Speaking
Interests
Skiing
Viticulture
Guitar
Aviation
Calculus

PROJECTS

SONGS AND MOVIES RECOMMENDER | React, Flask, ES6
Jul 2020 – Aug 2020 | New York, NY
- Built a movie and song recommendation web app using **React** with hooks and bootstrap and **Flask** to create an API.
- Integrated **Spotify API** calls to authenticate users and load playlists, search songs, save playlists, and **TMDB API** to search and select movies.
- Developed song recommendation and movie recommendation algorithms that are handled by **Flask API** calls from the front end.

BUDGET TRACKER | React, React Native, Flask, ES6
May 2020 – Jul 2020 | New York, NY
- Built a budget and subscriptions tracking web app and mobile app with a **React** and **React Native** front end and a **Flask API**.
- Implemented **React** hooks to store user inputs of monthly expenses in state, with a dynamic dashboard to display totals.
- Created **Flask API** to handle user authentication and authorization with **JWT**, with a **SQLite** database to save and load user's entries.

OMASKL INTERPRETER, EVALUATOR, TRANSLATOR | OCaml
Apr 2020 – May 2020 | Ithaca, NY
- Built an interpreter, translator, and evaluator to read a newly created language in input .txt files and output the translated **OCaml** code.
- Developed a new language "OMaskl" with OOP and functional programming features with a parser and lexer using .mly and .mli files.

SERVO DIAGRAM PAGE | React, ES6, CSS
Oct 2019 – Jan 2020 | Ithaca, NY
- Built a servo diagram page for the CUAir ground station in **React** to allow for a graphical visualization of servo positions to aid in changing parameters for tuning.
- Created containers corresponding to the position and orientation of servos with input boxes that directly send parameters to the plane.

EXTRACURRICULARS

CORNELL UNMANNED AIR SYSTEMS | Autopilot Subteam
Oct 2019 - Present | Ithaca, NY
- Joined the autopilot software subteam, which maintains software for autonomous flight planning and obstacle avoidance algorithms.
- Attended weekly full team and subteam meetings and work sessions to discuss updates and further develop the ground station, which connects to the plane during test flights.

SCIENCE OLYMPIAD AT CORNELL | Treasurer
Sep 2019 – Present | Ithaca, NY
- Forecasted expenses to allocate a $2000 budget to run tournaments for 500+ high school students by coordinating with Student Activities Funding Commission.
- Raised over $2500 in funds for the school year by reviewing sponsor letters and contacting sponsors.