

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

OOP and Data Structures

Networks

Functional Programming

Analysis of Algorithms

Multivariable Calculus

Linear Algebra

Digital Logic, Computer Organization

PROJECTS

SONGS AND MOVIES RECOMMENDER | REACT, FLASK, ES6

- 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

- 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

- 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

- Decreased aircraft tuning time by over 50% by building a servo diagram page for the CUAir ground station for visualization and sending of parameters directly.
- Created containers corresponding to the position and orientation of servos with inputs that receive from the store and send 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.