# Aster Yuk Kiu **Ch**

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# LINKS

Github://asterchun LinkedIn://aster-chun Personal Website://asterchun

## **EDUCATION**

## **UC BERKELEY**

**BA COMPUTER SCIENCE BA APPLIED MATHEMATICS** Expected May 2022 Cum. GPA: 3.9 / 4.0

# COURSEWORK

## **UNDERGRADUATE**

#### In Progress:

Efficient Algorithms Databases

Abstract Algebra

#### COMPLETED:

Compilers Artificial Intelligence Computer Security Data Structures Machine Structures Discrete Mathematics Information Devices and Systems Numerical Analysis

# SKILLS

Linear Algebra

#### **PROGRAMMING**

#### LANGUAGES

**Proficient** 

Kotlin • Java • Python • Javascript Familiar:

C • Go • SQL • CSS • HTML • RISC-V Matlab • Snap!

#### Tools

React • Git • Flask • NumPy • Volley Express.is • Android Studio • Node.is GraphQL • Apollo Client • OkHTTP MTFX

## **EXPERIENCE**

## **SPRINKLES** | Software Engineer Intern

May 2020 - August 2020 | Berkeley, CA

- Developed an Android app that performs user authentication and video upload to the iOS app Sprinkles.
- Utilized GraphQL and Apollo Client to communicate with online database to perform user authentication and to generate upload link.
- Used Fuel HTTP library to upload video onto database to be displayed in iOS app using HTTP PUT request.

## **UC BERKELEY EECS DEPARTMENT** | LAB ASE

December 2020 - Present | Berkeley, CA

- Taught students fundamental EE theory, hardware debugging skills and real-world application of linear algebra by assisting lab assignments.
- Helped ensure course was run smoothly for 1000+ students.

## **PROJECTS**

## COURT QUEUING SYSTEM | GITHUB, WEBSITE

Languages/Tools: JavaScript, HTML, CSS, React, Express.js, Node.js December 2020

- Developed a full stack web application that is used by Cal Badminton.
- Application allows players to sign up on a queue during open gym and will notify players when it is their turn.
- Application also contains a moderators page to edit queue and notify players.
- Utilized Websocket API to allow efficient data transfer for real-time collaborative editing.

## WHAT WE EATIN? | GITHUB

Languages/Tools: Kotlin, Android Studio, Volley | December 2020 - Present

- Developed an Android App that randomly picks a nearby restaurant.
- Allows user to specify preferences such as pricing, cuisine and location radius.
- Utilized Volley to make an API call to Yelp Fusion API to get list of nearby restaurants.
- Currently working on establishing database to allow collaborative choices between users.

#### CHOCOPY COMPILER | GITHUB: PRIVATE REPO

Languages: Java, jflex, Cup, RISC-V | September 2020 - November 2020

- Designed and implemented a fully functioning compiler for the Chocopy language - a subsection of Python.
- Compiler will generate AST for given code as a JSON object before performing type checking.
- After type checking, compiler will generate and optimize RISC-V code.
- Worked on a team with three other software engineers, using Git to maintain version control.

# **ENCRYPTED FILE SHARING SYSTEM** | GITHUB: PRIVATE REPO

Languages: Go | July 2020

- Designed and implemented an encrypted version of Dropbox.
- System allows users to share and revoke files with each other.
- Utilized block ciphers and HMACs to ensure integrity and confidentiality of files.