Cornell University, Ithaca, NY **EDUCATION**

Aug 2019 - May 2023 (expected)

B.A. in Computer Science

GPA: 4.17 / 4.00 | Dean's List for Excellence in Scholarship (all semesters)

Coursework CS 6820: Analysis of Algorithms* CS 6670: Computer Vision*

* = in progressCS 4820: Algorithms[†] CS 4780: Machine Learning[†]

CS 4414: Systems Programming* CS 3110: Functional Programming

 \dagger = teaching CS 4450: Computer Networks assistant CS 2800: Discrete Structures

CS 3410: System Organization MATH 2210: Linear Algebra

CS 2110: Data Structures & OOP[†] ENGRD 2700: Probability

SKILLS

Languages Python, OCaml, Typescript, JavaScript, C/C++, Java, HTML/CSS, Bash Technologies React, Angular, PyTorch, Redux, Flask, Git, Jupyter

EXPERIENCE

Google, Inc., Sunnyvale, CA (Remote)

May 2021 - Aug 2021

STEP Intern, Google Cloud AI

- Designed and developed hyperparameter configuration suite, enabling on-the-fly redeployment of model training for the recently launched Visual Inspection AI product
- Implemented entity tag support for backend operations using C++ and protocol buffers, reducing vulnerability to race conditions and improving product scalability
- Full-stack development with Angular, HTML/CSS, GraphQL, and a Google Spanner database

YITU Technology, Singapore

May 2020 - Aug 2020

Research and Development Intern

- Researched and implemented proprietary instance detection and orientation classification models in PyTorch to detect and classify identity cards in input images, decreasing mean absolute error by more than 20% relative to previous solution
- Classified presence of lung inflammation in MRI scans, utilizing logistic regression and random forest classifier, for use in publication in European Journal of Nuclear Medicine and Molecular Imaging

Cornell University Unmanned Air Systems, Ithaca, NY

Oct 2019 - present

Software Engineer, Subteam Lead

- Software engineer and incoming subteam lead at top undergraduate fixed-wing aircraft team, which manufactures a custom plane yearly to accomplish autonomous navigation and target identification
- Implemented end-to-end framework in PvTorch for training and evaluating machine learning models on images captured from autonomous aircraft, used by entire subteam
- Architected and deployed a new web service using React, Flask, and MySQL, for use on all flights, to run segmentation and classification algorithms on collected images

PREPRINTS & Edge Proposal Sets for Link Prediction [2] (7)

(under submission)

PUBLICATIONS Abhay Singh, Qian Huang, Linda Huang, Omkar Bhalerao, Horace He, Ser-Nam Lim, Austin Benson

Large Scale Learning on Non-Homophilous Graphs

(under submission)

Derek Lim, Felix Hohne, Xiuyu Li, Linda Huang, Vaishnavi Gupta, Omkar Bhalerao, Ser-Nam Lim

Projects

Skedaddle Camel 🖸

• Created interactive maze game in OCaml utilizing model-view-controller and state design patterns, in team of four

Animated Pomodoro Timer \square

• Implemented and deployed React/Redux app with Pomodoro timer functionality as a Chrome extension, with static and dynamic assets designed from scratch using HTML/CSS & Figma

Interactive Tax Calculator \Box

• Implemented Chrome extension that injects React scripts into relevant web pages to display post-tax product prices, utilizing SQLite database to store location-based tax information