

Griffin Choe

SOFTWARE ENGINEER · COMPUTER SCIENCE MAJOR · UNIVERSITY OF MICHIGAN

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Education

University of Michigan College of Engineering

Ann Arbor, MI

B.S.E. IN COMPUTER SCIENCE

Class of 2022

- GPA: 3.95/4.0 in Major, 3.85/4.0 Overall
- Coursework: Distributed Systems (in progress), Operating Systems & Advanced Operating Systems Projects, Data Structures & Algorithms, Web Systems, Computer Vision, Software Engineering, Computer Organization, Foundations of Computer Science
- Activities and Societies: Pi Alpha Phi fraternity, Asian American Association

Experience

Coinbase

Remote

INCOMING SOFTWARE ENGINEER INTERN - BACKEND TEAM

Jan. 2022 - Apr. 2022

Amazon

Seattle, WA

SOFTWARE ENGINEER INTERN - ROBOTICS TEAM

May 2021 - July 2021

- Developed a full-stack, customer facing feature on Scout, Amazon's autonomous package delivery robot.
- Implemented the front-end UI on both mobile and desktop, including buttons, loading spinners, and success/failure messaging.
- Built the back-end controller in Java to trigger and verify state change.
- Built an API in TypeScript to send out an SNS message upon failure, using AWS API Gateway, CloudFormation, DynamoDB, Lambda, and SNS.
- Created a Lambda in Java to process the SNS messages sent out of the API and take alternative action.
- Wrote integration tests for the Lambdas I developed to ensure the entire system functioned properly.
- Met stretch goals by implementing CDK generated metric dashboards for various Lambdas on our AWS stacks.

Projects

ghostern

2020

- Built a web application with one friend where users report whether or not they were "ghosted" by a company after applying or interviewing for an internship.
- Handled the backend development for the project, using Flask and SQLite to build a REST API.
- Deployed the backend with DigitalOcean and the frontend with Netlify, using Cloudflare's CDN to deliver the site's content.
- Featured on Product Hunt, acquiring 190 unique users on launch day.

typegod

2020

- Built a personal project where users take a 60 word typing test and post their name on a leaderboard ranked by words typed per minute.
- Used React to build the frontend and created a backend REST API with Flask and SQLite.
- Deployed on the cloud using Amazon Web Services (EC2 and Route53).
- Received 2500 visits and 100 posted scores in the first 7 days.

Unpaired Image-to-Image Translation

2020

- Implemented a cycle-consistent generative adversarial network (GAN) that generates Claude Monet-esque images from general input images without paired training examples.
- Used PyTorch to build and train a generator model and discriminator model.
- Submitted on Kaggle as a part of a competition and ranked 140th out of 221 competitors.

Network File Server

2021

- Implemented a multi-threaded network file server in C++ that synchronously handles client requests for creating, deleting, writing, and reading files/directories.
- Used RAIL techniques with reader/writer locks to minimize memory usage and used hand-over-hand locking to ensure proper synchronization.

Thread Library

2021

- Designed and implemented a thread library in C++ with support for threads, locks, and condition variables across multiple processors.

MapReduce

2020

- Implemented a multi-threaded, multi-process MapReduce server in Python.

Programming Skills

Languages C/C++ · Go · Java · Python · TypeScript · SQL · Bash **Technologies** AWS · Flask · React · Unix