SAMUEL YUAN

samuelyuan.com • syuan@utexas.edu • (346) 857-9528 • linkedin.com/in/YuanSamuel • github.com/YuanSamuel

EDUCATION

The University of Texas at Austin

B.S. Honors Computer Science, BBA Canfield Business Honors

Overall GPA: 3.86/4.0

EXPERIENCE

Roblox - Software Engineering Intern; San Mateo, CA

May 2023 - Present

May 2025

- Deployed gRPC endpoint to efficiently store and serve over 70 million user searches in .NET service
- Researched algorithm to detect trending searches from over 50M daily searches stored in data warehouse
- Implemented system to generate and store trending search candidates daily using Spark and Hive deployed on Airflow

Striveworks – *Software Engineering Intern;* Austin, TX

May 2022 – August 2022

- Constructed Golang microservice to analyze and report product dependencies, deployed on Kubernetes cluster with Helm
- Designed Kubernetes-in-Docker cluster to deploy local instance of microservice for testing, mocked out various features
- Wrote Python unit tests interfacing with Amazon S3 and various platform SDK functions using Pytest and Pandas libraries
- Created CI/CD pipeline jobs to pull in-development Docker images from private registry and test before deployment

Otto – Founding Engineer; Remote

July 2020 – January 2022

Pet management startup integrating software with QR code pet tag to centralize pet data and improve pet safety

- Developed cross-platform mobile app with 600+ downloads and average rating of 4.4 stars using Flutter and GraphQL
- Architected efficient NoSQL structure for storing and retrieving user and pet data on Firebase cloud database

PROJECTS

PicTag – Role: Founding Engineer

Dec 2021 - Present

- Built Flutter mobile and web user interfaces to enable AI-powered search for relevant images using CLIP model
- Engineered Golang API to create image vector embeddings from S3 bucket using AWS Lambda and SQS, stored in vector DB

ParaFLAI – Role: Lead Developer

May 2023

- Assembled Python federated learning system to improve training speed and data privacy compared to traditional models
- Applied cloud compute VMs and GPUs to concurrently train classification model across network of decentralized devices

CapsuleMap – Role: Lead Mobile Developer

April 2021

- Programmed cross-platform social media app focused on physical and mental health with Flutter, Provider, MobX, Firebase
- Integrated Google Maps SDK and Geolocation API to display current user location and database entries created nearby
- Awarded \$11,000 in claimable funding by the 1517 Fund to further develop application

VS Code GitHub Projects – *Role: Full Stack Developer*

February 2021

- Released open-source VS Code extension providing interface for GitHub Projects with 13,000+ total downloads
- Established persistent GraphQL communication by polling between multiple WebViews rendered by Svelte and GitHub API

LEADERSHIP EXPERIENCE AND ACTIVITIES

${\bf Undergraduate\ Computational\ Finance}-{\it Member}$

Spring 2022 - Present

- Craft market watches with insight into daily news and carefully researched stock pitches and analyses
- Developed trading simulation with React, Socket.io, and Node.js to simulate creating a market around a given value

Honors Business Association – *Vice President of External Affairs (Fall 2022)*

Fall 2021 – Spring 2023

- Led team of 3 to organize various philanthropic events involving 30+ members to serve the local community
- Organized food drive with honors program office collecting 25+ canned goods donated to the Central Texas Food Bank

HACK Initiative – *Co-Founder, Volunteer*

Spring 2019 - Spring 2021

- Launched volunteer program at two nearby junior high schools to teach coding to younger students
- Guided 50+ students in learning programming languages such as Java and JavaScript using interactive libraries such as p5.js

HONORS

• First Place at UT Computer Science Honors CritterFest Competition

October 2021

• Second Place Project and Most Novel Hack at Citrus Hack Hackathon

April 2021

ADDITIONAL INFORMATION

Programming Languages: Go, Python, Java, JavaScript, TypeScript, Dart, C, C#, Rust

Frameworks and Platforms: Docker, Kubernetes, Spark, Hive, React.js, Flutter, AWS, SQL, GraphQL, Node.js, .NET, Swagger