

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 | May 2025 |
|--|---|----------|

EXPERIENCE

| | |
|--|--------------------|
| Roblox – <i>Software Engineering Intern</i> ; San Mateo, CA | May 2023 – Present |
|--|--------------------|

- Deployed gRPC endpoint on .NET service to efficiently store and serve over 500M searches from 150M users in CockroachDB
- Researched chi-squared algorithm to detect trending searches from over 40M daily searches stored in data warehouse
- Implemented system to generate and store trending search candidates daily using Spark and Hive deployed on Airflow

| | |
|--|------------------------|
| Striveworks – <i>Software Engineering Intern</i> ; 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 – <i>Founding Engineer</i> ; 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 – <i>Role: Founding Engineer</i> | 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 – <i>Role: Lead Developer</i> | May 2023 |
|---|----------|

- Assembled PyTorch 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 – <i>Role: Lead Mobile Developer</i> | 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 – <i>Role: Full Stack Developer</i> | 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

| | |
|--|-----------------------|
| Undergraduate Computational Finance – <i>Member</i> | 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 – <i>Vice President of External Affairs (Fall 2022)</i> | 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 – <i>Co-Founder, Volunteer</i> | 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, CUDA

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