

Tianyi (Sam) Zhou

<https://developersam.com>

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Education

Cornell University

BS in Computer Science

Expected May 2021 | Ithaca, NY

College of Engineering

Dean's List (All Semesters)

GPA: 4.15 / 4.3

Links

Personal Website: [Developer Sam](#)

Blog: [Developer Sam Blog](#)

GitHub: [SamChou19815](#)

Courses

Past:

OO Design Data Structs Honors

Discrete Structures

Data Structs & Functional Programming

Intro to Analysis of Algorithms

Ongoing:

Systems Programming

Programming Languages & Logics

Machine Learning Intelligent Systems

Skills

Programming

Over 10000 lines:

Java • Kotlin

Over 5000 lines:

Python • TypeScript • JavaScript

OCaml • PHP • CSS • \LaTeX

Over 1000 lines:

Swift • Go

Familiar:

MySQL

DevOps

Familiar:

Kubernetes, Travis CI

Experience

Cornell University | Computer Science Teaching Assistant

Feb 2018 – Current | Ithaca, NY

- Held office hours and graded assignments for students.
- Courses: OO Design Data Structs Honors (90+ students), Discrete Structures (350+ students).

U-Learn Education Group | Software Engineering Intern

Dec 2017 - Jan 2018, May 2018 – June 2018 | Shanghai, China

- As the sole developer, designed and developed a system with a responsive web interface to automate workflow for assisting student college choice and application.
- The centralized system replaces the old way of manual data sharing between consultants and solves the problem of information mismanagement.
- All code was pushed to production and stably serving about 50 students and 10 consultants.

Projects

SAMPL | Kotlin, ANTLR

May 2018 - Present

- An interpreter and compiler project for my own functional programming language SAMPL.
- The statically type-checked language supports generics, first-class functions, and basic type inference, with a Kotlin-like syntax and OCaml-like semantics.

Badges for GCP Cloud Build | TypeScript, Firebase

August 2018

- An easily-deployable Firebase Function to automatically generate build badges for GCP Cloud Build to be publicly displayed on GitHub.

OConquer | OCaml, Java, Angular

March 2018 - May 2018

- A strategy game with military units controlled by programs, developed as the final project for CS 3110 (Functional Programming).
- The game is powered by an OCaml backend and Angular frontend. Programs that control military units communicate with the backend via interactive IO.

TEN | Kotlin

July 2017 - June 2018

- A board game that extends the tic-tac-toe to 9×9 board, with an AI-powered by Monte-Carlo Tree Search algorithm.
- The AI can achieve super-human performance with 1.5 seconds of thinking time for each move.

Chunk Reader | Java, JavaScript, CSS3, HTML5

September 2017

- A web app built during a Hackathon with over 70 teams and 300 participants.
- The app used NLP to extract crucial information and generate a summary from any given text, with help of Google Cloud Natural Language APIs.
- Prize: Best Use of Google Cloud Platform/Big Data Products.