Jason Han

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Education_

Columbia University

New York, NY

MS in Computer Science, Machine Learning Track

Expected Dec 2025

Courses: NLP, Cloud Computing, Compilers

Vassar College Poughkeepsie, NY

BA in Computer Science and Mathematics

May 2023

Courses: Operating Systems, Algorithms, Databases, AI

Work Experience_

Silo New York, NY

Founding Engineer Sep 2024 – Present

silorepo.com

• Create an AI-powered portfolio generator for software developers to showcase their projects succinctly.

- Implement an algorithm using RAG to summarize a source code repository into a project description.
- Expand the platform to Columbia and Duke students, and supporting 100+ daily active users.

IBM Boston, MA

Back-End SDE Intern

May 2022 – Aug 2022

- Created a weather bot hosted on IBM Cloud using the Watson Assistant and Watson Natural Language Understanding API.
- Enhanced the error handling feature in Watson Assistant Actions to output detailed error messages.
- Fixed 200+ backend unit test cases in Node.js and integrated these into the CI/CD pipeline.
- Developed a Python tool to automate logging auditing tickets for production database access.

Vassar College Poughkeepsie, NY

Undergraduate Research Summer Institute (URSI)

Jun 2021 - Jul 2021

- Simulated evolution in Python and C++ using ROS 2, implementing biological phenomenon such as genotype to phenotype mappings, neuron/sensor connectivity and weights, and fitness landscapes.
- Ran simulations in parallel using Python in Hopper, a high-performance Linux computing cluster.

Google New York, NY

STEP Intern May 2020 – Aug 2020

- Completed the entire web development process including writing design docs, implementation, unit testing, and deployment.
- Leveraged Google Cloud Platform (GCP) to deploy a fast, responsive web app that supports upwards of 1000+ concurrent users.
- Designed a backend using Java Servlets that implements a REST API to be used by the web app, and tested using JUnit and Mockito test suites.
- Integrated Google Places API, Maps API, and OAuth API, as well as Google Datastore into the web app.

Projects

Simple Text | C++, OpenGL, Objective-C

Oct 2023 - Present

- github.com/jason 5122/simple-text
 - Architect a GPU-accelerated, cross-platform text editor and a custom GUI framework.
 - Build a custom text rendering engine using Core Text, DirectWrite, and Pango, with the rasterization results cached using a glyph atlas.
 - Profile performance to ensure redraws happen in <2 milliseconds (500+ FPS).

Skills

Programming Languages: C++, Java, JavaScript, SQL, HTML/CSS, Python, Objective-C, OCaml, Bash

Libraries: Node.js, React, OpenGL

Developer Tools: Git, AWS, GCP, Docker, Unix/Linux, CI/CD