Adam Chiu Reynolds

Adaptable Developer with Strong Mathematical Background

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SUMMARY

My interests lie at the intersection of math and computer science. I enjoy the challenge of simplifying complex theoretical problems into flexible and extensible software. I easily adapt to new frameworks and libraries to suit the task at hand.

EDUCATION

M.S., Computer Science, May 2022
Master's Student Honors Program
University of Southern California (GPA: 3.93/4.00)

B.S., Mathematics - Computer Science, June 2019
University of California, San Diego

SKILLS

C, C#, Python, Unity3D, JavaScript, TypeScript, NodeJS, Serverless Architecture, React
Git, LaTeX, notion, Linear Algebra, Numerical Analysis

WORK | PROJECTS

December 2022: Built an NLP-driven horoscope generator. Built frontend with React, backend with node.js hosted on a serverless Cloudflare Workers instance.

May 2022 - November 2022: Worked full-time designing and implementing a virtual card game as a founding member of a small startup game studio. Designed and implemented core systems. Streamlined game data loading pipeline. Set up outgoing game telemetry updates to remote backend.

October 2022: Third place, team of two, in lablab.ai Cohere Hackathon #2, a natural language processing hackathon with over 100 participants, by creating a chat bot that implements fuzzy search on a chat log.

Fall 2021: Invited to work as a research assistant in the Allegro group, headed by Robin Jia, at USC, studying techniques to improve robustness of large language models.

Summer 2021: Built a small declarative language to describe card effects for a card game. Created a grammar to describe these card effects, implemented corresponding data types using the C# type system, and implemented a parser for that language.

Fall 2020: Worked with a team on a 3D puzzle platformer made in Unity3D. Implemented movement and camera controls to behave smoothly in a 3D environment.

Summer 2019: Invited to intern in the UCSD ProgSys group, developing ways of specifying verifiable polynomial resource bounds on functional programs using a Haskell-like type system. Specified new types and corresponding type inference rules. Published as "Liquid Resource Types", ICFP 2020.

Summer 2017: Invited to intern in Joel Yuen-Zhou's nanophotonics lab. Modeled constrained particle states in MatLab using numerical solutions to the Schrödinger Equation to advance his research.