

Adam Chiu Reynolds

Adaptable Developer with Strong
Mathematical Background

adam.chiu.reynolds@gmail.com
858-900-8436
Los Angeles, CA
<https://www.tarinyoom.io/>

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, JavaScript, TypeScript, Unity3D, Serverless Architecture, NodeJS, React
Git, Linux, 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. Wrote Jupyter scripts to process in parallel tens of thousands of data points on Google GPUs through Google Colab.

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.