Riley Tallman

realleyriley.github.io/portfolio
rptallman@gmail.com
linkedin.com/in/rileytallman
publications

EDUCATION

Arizona State University

- B.S. – Computer Science with Honors (December 2019) 3.95 GPA
- M.S. – A.I. and Computer Vision (December 2020) 4.00 GPA

SKILLS

Programming Languages	JavaScript, HTML, CSS, GraphQL, Python, git, Java, C++
Libraries	Express, NextJS, Keras, Material UI, AntDesign, Apollo GraphQL
Other	Agile Scrum, AWS, SendGrid, Auth0, Stripe, Figma

EXPERIENCE

Tradeblock
March 2022 – Present

Software Engineer – Austin, TX
- Developing 3 different React apps using different combinations of NextJS, Apollo GraphQL, and React Native to achieve a 4.5 rating on the App Store
- Testing various AI techniques to create 3D models of shoes including photogrammetry and Neural Radiance Fields (NeRF)

General Motors
January 2021 – March 2022

Software Engineer – Austin, TX
- Built a responsive web application using React and many internal REST API microservices reducing average call time by at least 5-10 minutes saving roughly $100 million per year

Systems Imagination
May – August 2019

Artificial Intelligence Intern – Tempe, AZ
- Directed a team of four to improve hypergraph database algorithms with AI
- Computed boosted decision trees with a data-driven approach to predict magnetic interactions within molecules using GPU acceleration

Teaching Assistant
August – December 2019

CSE471 Intro to Artificial Intelligence – Tempe, AZ
- Counseled AI concepts like A* search and Bayes nets for 150+ students
- Coached students with AI algorithm implementation in python

PROJECTS

Web 3.0
December 2021

Ethereum Smart Contract (SOL)
- Created and deployed a smart contract on the Ethereum blockchain using SOL and built a web3 application using Next.js to interface with the contract

Senior Capstone
January – December 2019

Autonomous Driving Hackathon (1st Place)
- Coordinated a team of 5 and took 1st place by training a residual CNN to autonomously drive and recognize objects on an NVIDIA Jetson Nano

Honors Thesis
August – November 2019

Smartphone Computer Vision (swift)
- Improved accuracy by 600% after developing a novel algorithm to classify the orientation of an iPhone with computer vision in Swift

Visual Question Answering
February – May 2020

Stanford GQA (python)
- Experimented with VQA methods using state of the art Natural Language Processing and Computer Vision to outperform human performance