





# Riley Tallman

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 publications

## EDUCATION

Arizona State University

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

## SKILLS

Programming Languages  
Libraries  
Other

Python, Javascript, Java, git, SQL, C++, Swift  
Express, NextJS, Keras, sklearn, ROS, OpenCV, pandas, numpy  
React, Computer Vision, Machine Learning, NLP, Scrum, AWS

## EXPERIENCE

General Motors

January 2021 – Present



Software Engineer – Austin, TX

- Developing the front and back end of an ExpressJS React app
- Creating automated unit tests using both Jest with Javascript & Selenium with Java to ensure quality

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

DriveTime

May – August 2018



Cyber Security Intern – Tempe, AZ

- Reduced inquiries by 10% after building a website to handle internal data loss
- Developed automated security dashboards monitoring email & web filtering and anti-virus software with REST APIs and python
- Administered phishing security tests to 5,000+ employees

## PROJECTS

Web 3.0

December 2021

Ethereum Smart Control (Solidity)

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

Senior Capstone

January – December 2019

Autonomous Driving Hackathon (1<sup>st</sup> Place)

- Coordinated a team of 5 and took 1<sup>st</sup> 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

- 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