Riley Tallman

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EDUCATION

Arizona State University
Computer Science

- B.S. with Honors — 3.95 GPA
- M.S. (specializing in Computer Vision, graduating Dec. 2020) — 3.78 GPA

SKILLS

Programming Languages	C++, Python, git, SQL, C, MATLAB, clingo, Java
Libraries	Keras, sklearn, pandas, numpy, ROS, OpenCV, dlib
Other	Computer Vision, Machine Learning, Scrum, AWS, Patents, Linux

EXPERIENCE

Systems Imagination
May – August 2019

Artificial Intelligence Engineer – Tempe, AZ

- Led a team of four to improve hypergraph database algorithms with AI
- Used boosted decision trees and a data-driven approach to predict magnetic interactions within molecules
- Enhanced predictive models by engineering 1,000 features using an NVIDIA DGX workstation

Teaching Assistant
August – December 2019

CSE471 Intro to Artificial Intelligence – Tempe, AZ

- Taught AI concepts like A* search and Bayes nets for 150+ students
- Assisted students with AI algorithm implementation in python

DriveTime
May – August 2018

Cyber Security Intern – Tempe, AZ

- Reduced inquiries by 10% after building a Sharepoint website to handle internal and external data loss of sensitive IT Compliance documents
- Built 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

Senior Capstone
January – December 2019

Autonomous Driving Hackathon (1st Place)

- Led a team of 5 and took 1st place by training a residual CNN to autonomously drive and recognize objects on an NVIDIA Jetson Nano and Sparkfun Robot

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

Hash Table Dictionary
January – May 2018

C++ Word Unscrambler

- Conglomerated 240k dictionary words into a hash table with collision resolution by chaining
- Quickly compared all permutations of an input string in linear time $O(1)$