Riley Tallman

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EDUCATION

Arizona State University
Graduating December 2020

Computer Science, MS with Honors, 3.91 GPA

- Conducting research in Artificial Intelligence(AI) and Computer Vision

SKILLS

Programming Languages	C++, Python, git, SQL, C, Matlab, clingo, Java
Libraries	Keras, sklearn, pandas, numpy, ROS, OpenCV, dlib
Other	Statistical Machine Learning, Scrum, Jupyter, Linux, Inkscape

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 – Present

CSE471 Intro to Artificial Intelligence – Tempe, AZ

- Teaching AI concepts and holding review sessions for 150 students
- Assisting 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 2019 – Present

Autonomous Driving Worldwide Competition

- Competing to achieve the fastest lap time in a simulated robotic environment using reinforcement learning and computer vision

Honors Thesis
January 2019 – Present

Smartphone Computer Vision

- Achieved 99% classification accuracy with an efficient convolutional neural network to identify the user in Swift for iOS

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 $O(1)$