


# Riley Tallman

 [rptallman.github.io/portfolio](https://rptallman.github.io/portfolio)

 [rptallman@gmail.com](mailto:rptallman@gmail.com)

 [linkedin.com/in/rileytallman](https://linkedin.com/in/rileytallman)

## EDUCATION

Arizona State University  
Graduating December 2020

Computer Science, MS with Honors

- Specializing in AI and Computer Vision

## SKILLS

Programming Languages  
Libraries  
Other

C++, Python, git, SQL, C, Java  
Keras, sklearn, OpenCV, dlib, ROS  
Scrum, Linux, VS Code, MS Word, Inkscape (vector graphic design)

## EXPERIENCE

Systems Imagination  
May – August 2019

Artificial Intelligence Engineer – Tempe, AZ

- Led a team of four to improve database access algorithms with AI and patented hypergraph structures
- Used machine learning to predict 7.5 million magnetic interactions between two atoms in molecules with a data-driven approach
- 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 and held review sessions for 150 students
- Assisted students with python projects

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

Honors Thesis  
January 2019 – Present

Smartphone Computer Vision

- Training an efficient convolutional neural network to identify the user

Data Structures  
& Algorithms  
January 2019 – Present

C++ Word Unscrambler

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