Torrance, CA (424) 237-6578 bwolfson97@gmail.com

# **Brandon Wolfson**

www.linkedin.com/in/bw97 https://github.com/bwolfson97 https://bwolfson97.github.io/

# EDUCATION

University of California, Los Angeles, Los Angeles, CA

Sept. 2016 - June 2020

BS, Mathematics of Computation

- GPA: 3.41 / 4.0
- Relevant Coursework: Introduction to Machine Learning, Data Structures and Algorithms, Software Construction Lab, Probability Theory, Introduction to Mathematical Statistics.
- Honors/Awards: Northrop Grumman Scholarship for Employee's Children. Dean's Honor List.

### University of St Andrews, St Andrews, Scotland

Sept. 2018 - Dec. 2018

Relevant Coursework: Databases.

### **Udacity Deep Learning Nanodegree**

July 2018 – Nov. 2018

Applied deep learning to natural language processing, computer vision, image and text generation, time series
prediction, and reinforcement learning through coursework and projects.

#### **SKILLS**

 Advanced: C++, Python; Intermediate: Keras, TensorFlow, NumPy, Linux, Git; Beginner: Pandas, scikit-learn, SQL, AWS, CUDA.

### **EMPLOYMENT**

Centauri, Colorado Springs, CO

July 2020 - Present

Software Engineer

https://www.centauricorp.com

**Centauri**, Kihei, HI Machine Learning Intern July 2019 – Nov 2019

https://www.centauricorp.com

- Developed company's best object detection algorithm, as measured by precision and recall, by using Python, Keras, and TensorFlow and building off the established YOLO v3 CNN architecture.
- Refactored data preparation script to be 12 times faster, by utilizing TensorFlow, NumPy, and a GPU.
- Classified simulated satellite orbits with 99% accuracy by applying random forests with scikit-learn and Pandas.
- Hired for full-time position after exceeding expectations as an intern.

### **TECHNICAL PROJECTS**

Modeling COVID-19 Prevalence in US Prisons (UCLA) <a href="https://github.com/bwolfson97/UCLA-Networks-Final-Project">https://github.com/bwolfson97/UCLA-Networks-Final-Project</a>

 Modeled effects of various interventions on spread of COVID-19 in US prisons by using Python to run an SIR model on a prison network.

## Tetris (UCLA)

https://github.com/bwolfson97/Tetris

• Programmed Tetris game in C++, receiving an A+, by applying large project object-oriented programming skills.

### Dog Breed Identifier (Udacity)

https://github.com/bwolfson97/Dog-Identifier

• Identified dog breeds in images with 85% accuracy by using Python and Keras to build a convolutional neural network (CNN) trained on over 8,000 dog images.

#### **Human Face Generator (Udacity)**

https://github.com/bwolfson97/Face-Generator

Generated images of human faces by implementing a deep convolutional generative adversarial network (DCGAN) using Python and TensorFlow and training on over 200,000 celebrity faces.

### LEADERSHIP EXPERIENCE

Boy Scouts of America, Torrance, CA

May 2008 - Dec. 2015

Eagle Scout Rank Recipient

- Led team of 19 people, in over 180 total volunteer work hours, in construction of information kiosk at Lago Seco Community Gardens, used by over 125 people.
- Attained \$442 of funding by presenting project plan to Home Depot and receiving offer to fund whole project.
- Identified upgrades to include in new kiosk design by meeting with City of Torrance officials; Drafted new kiosk to include slatted, rain-resistant table for gardeners to trade produce, new plexiglass locking system for city officials to post announcements, and blackboard to allow gardeners to communicate with each other.