**David Olson**

Casa Grande, Arizona

Mobile: 520-280-9444

David.Earl.Olson@gmail.com

Github: github.com/deolson

Website: davidolson.me

**Education**

**Bachelor of Science in Computer Science** ❖ May 2017

**Minor in Mathematics**

**University of Puget Sound** ❖Tacoma**,** Washington

❖ ***GPA***: 3.6/4.0

* ***Relevant Courses Include:*** 
  + Software Engineering
  + Assembly Language and Computer Architecture
  + Programming Language Paradigms
  + Computer Graphics
  + Network Programming
  + Algorithms and Data Structures
  + Database Management Systems
  + Operating Systems
  + Applied Statistics

**Projects**

* **Capstone | Music Generation and Prediction | 2017 | Python/Java**
  + Worked with three teammates using TensorFlow and Python to build a neural network that trained on J.S. Bach Chorales.
  + Automated data collection from MIDI files.
  + Using the TensorFlow library, graphed both the PCA and t-SNE dimensionality reduction algorithms of our model.
* **Xinu Kernel | Operating Systems | 2017 | C**
  + Constructed the process queue for the CPU scheduler and extend this with priority scheduling.
  + Added a programmable interval timer and atomic locking support.
  + Implemented deadlock detection and recovery with a linked list graph representation.
* **ESPN Data Miner | Databases | 2016 | PHP/HTML/CSS/SQLite**
  + Collaboration with two teammates with my efforts largely involved in data scraping.
  + Created web scraping bots using PHP that took data from ESPN DOM and put that information into a SQLite database.
  + Built a website that displayed and graphed the data in our database.
* **802.11** **| Networking | 2016 | Java**
  + Paired project in building a simplified 802.11 data link layer.
  + Followed correct protocol specifications when interacting with provided RF and network layers.

**Technology Experience**

* ***Programming/Languages:***

**Proficient:** Java

**Intermediate:** Python, C, PHP, LaTeX

**Used:** NodeJS, jQuery, HTML / CSS, Haskell, Prolog

* ***Database Management:*** SQL (SQLite)
* ***Design & Tools:*** Object Oriented Programming, GitHub Workflow, SAGE/MATLAB
* ***Systems:*** Windows, Ubuntu / Linux, Xinu

**Activities**

* Student Athletic Advisory Committee, 2016-2017
* University of Puget Sound Varsity Swim Team, 2013-2017
  + **Captain**, 2016-2017
* Pi Mu Epsilon National Mathematics Honor Society, 2017
* Upsilon Pi Epsilon Honor Society for the Computing and Information Disciplines, 2017
* Volunteered yearly for Cougar Week, teaching children in the community how to swim and progress their technique, 2009-2015