DAVID OLSON

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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:*
  - o Software Engineering
  - o Assembly Language and Computer Architecture
  - o Programming Language Paradigms
  - o Computer Graphics
  - o Network Programming
  - o Algorithms and Data Structures
  - o Database Management Systems
  - o Operating Systems
  - o Applied Statistics

Projects

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