OLIVER TERRELL

Software Engineer | https://ghoozie.tk

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EXPERIENCE

- **Greenstar Group, Inc. | Software Engineer, Co-Founder | Sep. 2020 – Present**
  Co-Founded FinTech software company (website https://www.greenstargroup.org). Built products such as Markowitz Optimizer (Flask, Python, Docker) and CRM (React, Flask, SQL) from inception through deployment. Markowitz Portfolio Optimizer leveraged Flask server-side to deliver product that consumed financial data from a Yahoo Finance API, ran it through a quadratic programmer encoded in Python, ported to a variety of MPLD3 graphs, and rendered results into a LaTeX template suitable for professional use. Resolved cross-machine dependencies with Docker. CRM tool incorporates a React front-end with Flask back-end for communication with our AWS database and was initially built between PHP and JS (ES6) before refactoring to a blend of Flask/React, following best practices.

- **Uncommon Core | Software Engineer | Jan. 2020 – Present**
  Wrote a majority of the codebase with one other engineer, primarily in vanilla PHP back end with vanilla JS front end. Wrote extensive automated testing functions in Selenium that allowed our team to move cleanly and quickly through developmental phase. Developed a MySQL database interface in PHP and Python that maximized modularity of the codebase. Worked on Python package management tools used to automatically flatten namespaces of packages for global use locally. Administrated and deployed Flask services running TensorFlow models using Docker and Kubernetes.

- **Neural Engineer (Student) | Carnegie Mellon University | Spring 2018**
  A hands-on approach was taken to build and test multiple different artificial intelligence neural networks. The software Lens was used to create various networks that worked with small-batch data sets, trained over varying epochs, with variable numbers of hidden, input, and output units. Understood the basic nature of artificial intelligence and how one can design and program a network for a specific purpose based on novel inputs after training on a standard set.

SKILLS

IBM® SPSS | Data Analysis | Kubernetes | Docker | Neural Networks | Python | PHP | HTML/CSS | Selenium | ML
SQL | MySQL | JavaScript | TensorFlow | Scikit-Learn | GCS | AWS | GitHub (/ghoozie) | JavaScript | MacOS | Windows
Remote Teamwork | SQLAlchemy | mplD3 | React | D3 | Flask | LaTeX | Front-End | Back-End | Full-Stack | and more

INTERESTS

- **Lead Author | SQUARE1™ Book | Neuromotor Physical Therapy and Training System | Summer 2019 – Current**
  Authoring textbook "Square1™: A Neuromechanical Approach to Human Movement". Square1 outlines a neuromotor approach to physical therapy involving real-time assessment and correction of joint actions.

- **Winning Team | Entrepreneurship Practicum | Carnegie Mellon University | Fall 2012**
  In an entrepreneurship class my team used various methods to land first place in the class, accruing winnings of over $10,000 cash from an initial stipend of $100 after mergers with other teams. We engaged in various opportunities including, but not limited to, sales, operations, incentivized signups, and delivering presentations both on and off campus.

EDUCATION / COURSEWORK

- Carnegie Mellon University
- Mellon College of Science
- B.S. Neuroscience | May 2019

(15-110) Principles of Computing
(03-363) Systems Neuroscience
(85-419) Parallel and Distributed Processing (AI/ML)

ATHLETICS

- **Carnegie Mellon University | Varsity Football | Varsity Track & Field**

- **Carnegie Mellon University | President & Founder | Archery Club**