OLIVER TERRELL

Software Engineer | https://ghoozie.tk

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EDUCATION / COURSEWORK

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

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

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 automatically scraped financial data from Yahoo Finance, 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. Initially built between PHP and JS (ES6) before porting to a blend of Flask/React.

- **Uncommon Core | Software Engineer | June 2020 – Dec. 2020**
  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 Network Encoding | 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 | Google Cloud Services | GitHub (/ghoozie) | JavaScript | MacOS Windows | Remote Teamwork | SQLAlchemy | mplD3 | React | D3 | Flask | LaTeX | Front-End | Back-End | Full-Stack

INTERESTS

- **Lead Author | SQUARE1™ Book | Neuromotor Physical Therapy and Training System | Summer 2019 – Current**
  Authoring textbook "Foundations of Square1™: Real-Time Assessment and Correction of Neuromotor Compensations" Square1 outlines a neuromotor approach to physical therapy involving real-time assessment and correction joint actions.

- **Winning Team | Entrepreneurship Practicum | Carnegie Mellon University | Fall 2012**
  In an entrepreneurship class taught at Carnegie Mellon by the famed R.F. Culbertson, my team, led by Meera Lakhavani, 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.

ATHLETICS

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

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