OLIVER TERRELL

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Portfolio Website

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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
(85-419) Parallel and Distributed Processing

EXPERIENCE

- **Uncommon Core | Software Developer | Summer 2020 - Current**
  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 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.

- **Gittis Lab | Research Assistant | Mapping Cerebellum to Basal Ganglia | Spring 2018**
  Applied optogenetic methods and paw tracking algorithms to establish neural link between cerebellum and basal ganglia in mice. Worked alongside Ph.D. students in a first-of-its-kind study to prove previously theorized synaptic link between two brain structures responsible for motor skill learning.

- **Neural Network Encoding | Carnegie Mellon University | Spring 2018**
  In the class Parallel and Distributed Processing in the Computer Science department at Carnegie Mellon, 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 and with varying number of hidden, input, and output units to understand the nature of artificial intelligence and how one can design and program a network to produce desired outcomes 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) | pip | Linux | Unix Mac OS | Windows | Zoom**

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 of perceived weak joint actions and the neuromotor compensations that arise as a result.

- **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**