**Motolani Olarinre** Phone: 862-223-3017
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## Education:

**Carnegie Mellon University** **Pittsburgh, PA**
Doctor of Philosophy in Statistics and Machine Learning Jan 2025

**New Jersey Institute of Technology** **Newark, NJ**
Master of Science in Computational Neuroscience | GPA: 3.9/4.0 May 2013
Bachelor of Science in Applied Mathematics | GPA: 3.7/4.0 May 2011

## Technical Skills:

Python (PyTorch, scikit-learn, NumPy, SciPy), R, SQL, MATLAB, .NET Framework, AWS, Angular.

## Work Experience:

**Meta Reality Labs** **New York, NY**
**Research Scientist Intern** May 2024 – August 2024
- Developed algorithms to advance Neuromotor interface technology in consumer products.

**Performance Photo Co.** **Pittsburgh, PA**
**Machine learning engineer** January 2023 – November 2023
- Engineered a deep learning-based person reidentification system that enables precise searches of query pictures within large-scale image databases, attaining 96% rank-1 accuracy.
- Developed an intuitive front-end user interface for searching professional photo albums using Angular framework, and deployed to AWS.
- Increased clients' professional picture sales revenue by 33%.

**AT&T Labs** **Middletown, NJ**
**Quantitative Research Intern** June 2022 – August 2022
- Developed and deployed a statistical model to forecast cell tower user traffic across the country from vast user datasets.
- Increased the forecasting accuracy by 36% over existing baseline.

**Intel Corporation** **Hillsboro, OR**
**Software engineer** July 2013 – July 2018
- Built and maintained full stack windows applications to automate statistical analysis of large production data sets using Microsoft's .NET framework.
- Reduced product testing cost by 40% by applying survival analysis to product data.

## Research Experience:

**Carnegie Mellon University** **Pittsburgh, PA**
**Statistics and Machine Learning Department** September 2020 – Present
- Built statistical and machine learning models to describe pathways of signal flow through visual areas of the brain from large scale neuronal recordings.

**New Jersey Institute of Technology** **Newark, NJ**
**Stomatogastric Ganglion (STG) Lab Group** May 2011 – May 2013
- Built bio-physical models of neuronal activity to describe the mechanisms by which they self-regulate.

## Publications:

- Kass, R., Bong, H., Olarinre, M., Xin, Q., and Urban, K. "Identification of interacting neural populations: methods and statistical considerations." Journal of Neurophysiology 130(3) (2023): 475-496.
- Chen, Y., Douglas, H., Medina, B., Olarinre, M., Siegle, J. and Kass, R. "Population burst propagation across interacting areas of the brain." Journal of Neurophysiology 128(6) (2022): 1578-1592.
- Rotstein, H., Olarinre, M., & Golowasch, J. "Dynamic compensation mechanism gives rise to period and duty-cycle level sets in oscillatory neuronal models." Journal of Neurophysiology 116(5) (2016): 2431-2452.

## Honors:

National Science Foundation Graduate Research Fellowship Program Honorable Mention March 2020
Intel's Quality and Reliability Divisional Recognition Awardee March 2018
National GEM Consortium University Fellow January 2018