# Kachi Odoemene

kachi.odoemene [at] gmail.com | https://kachio.github.io

Citizenship: USA

Clearance: Secret (DoD)

# **Skills**

**Programming & Software**: Python (numpy, scikit-learn, scipy, pandas, keras, tensorflow, pytorch), MATLAB, R; limited: C and C++

**Machine Learning**: Supervised and Unsupervised, Dimensionality Reduction, Clustering, Neural Networks, Deep Learning, Computer Vision, Natural Language Processing

**Quantitative & Statistical Methods**: Signal and image processing, Time series, Regression (Linear, Logistic, Nonlinear), Correlation, Hypothesis & Statistical tests, Linear Algebra

# Deep Learning Projects

Army Signal Classification Challenge (6th place, Keras/Tensorflow)

Kaggle Staoil Iceberg Image Classification Challenge (Top 14 %, Keras/Tensorflow)

Toxic comment classification (NLP, Fastai/Pytorch)

Anomaly Detection on Credit Card Fraud Data (Neural Networks, Keras/Tensorflow)

# **Employment History**

# **Booz Allen Hamilton/** Machine Learning Data Scientist

2018 - Present | Laurel, MD

Test and evaluate existing biometric (e.g. face, finger & iris) recognition technologies.

Develop machine learning algorithms for multimodal fusion of biometric data (Python).

Implement deep learning model to estimate geo-location from images (Python).

#### **Army Research Laboratory/** Postdoctoral Fellow

2017 - 2018 | Aberdeen, MD

Data analysis and modeling of visual search behavior and neurophysiology (*Python*).

Prototype machine learning algorithms for EEG muscle artifact removal (MATLAB/Python).

### **Cold Spring Harbor Laboratory/** Graduate Research Associate

2011 - 2017 | Cold Spring Harbor, NY

Executed on research program to investigate the causal role of rodent visual brain areas to decision-making behavior.

Built machine learning classifier to decode neural population activity (*Python*).

Wrote software for data collection, processing, and analysis (MATLAB & R).

Presented research findings at scientific workshops and conferences.

#### Education

# **Cold Spring Harbor Laboratory/** PhD Systems Neuroscience

2017 | Cold Spring Harbor NY

Purdue University/ MS Biomedical Engineering

2011 | West Lafayette IN

# The George Washington University/ BS Biomedical Engineering

2009 | Washington DC

Senior Design Capstone Project: Vocalization analysis software tool (MATLAB)