# Seun Eisape

Machine Learning, Brain Computer Interfaces, Cognitive Science, Natural language processing eisape@berkeley.edu

## Education

2024 – 2029 University of California, Berkeley, Ph.D. Electrical Engineering & Computer Science Advisors: Jack Gallant, Alane Suhr

2020 – 2024 Haverford College, B.S. Computer Science

Advisors: Daniel Grodner, Alvin Grissom II, Xiaodong Qu, Joshua Hartshorne

#### Research

#### 2024 - Johns Hopkins University, Visiting Research Scholar

 Visiting Researcher at the SCALE'24 workshop, held at the Human Language Technology Center of Excellence. Created multimodal information retrieval pipelines for video. Research supported by the GEM Fellowship.

## 2022 - Swarthmore College, Cognitive Science/Semantics Lab

- Constructed computational models of cognition. Conducted large-scale web experiments using the, Java-based, PCIbex framework. Research supported by a \$6,000 grant from the KINSC/Velay fellows program.
- Conducted electroencephalogram (EEG) data collection to investigate the neural processing of the singular 'they/them' pronouns.

### 2023 - Swarthmore College, Brain Computer Interfaces Lab

• Developing methods to improve generalization performance of computational neuroscience tools with an emphasis on pre-training and electroencephalogram (EEG) data. Research funded by \$3,000 Chesick Scholar Grant.

## 2022 - Haverford College, Machine Learning Lab

• Train transformers for machine translation. Developed novel ablation study to research capabilities of large machine translation models.

# 2021 - 2021 Boston College, Language Learning Lab

• Developed a Wiktionary data scraper, amassing 1-million nouns across 80+ languages enabling a clustering analysis over Swadesh lists. Work supported by BUCLD travel fellowship.

# **Employment**

### 2023 - Ask Media Group, Machine Learning

• Worked with Ask's Data Science team, implementing GPT-3 and Llama2 (LLM's) to rectify the spelling of 100 million+ search queries. Conducted a clustering analysis of these queries to gain user insight. This internship includes a \$5,000 academic stipend.

## 2022 - 2022 Angi, Software Engineering

Worked with Angi's Third Party Integrations team securing web forms to ensure data integrity. I also worked revamp their careers page, increasing traffic by 25%. This internship includes a \$15,000 academic stipend.

## 2023 - Peetey Greene (Philadelphia Chapter), Discrete Math Tutor

• Tutor currently incarcerated people in discrete math, including logic, algorithms, and probability theory. supporting the continuation of students obtaining their Bachelors Degree.

## 2022 - Haverford College, Technician Manager

• Manage staff of 25+ providing sound/lighting engineering, for major campus events.

# 2023 - Haverford College, Teaching Assistant

• TA for data science (CS260) & introduction to computer science (CS105).

# **Skills**

Python, MATLAB, JavaScript, Java, HTML, C++, NLTK, Pytorch, Tensorflow, and Scikit-learn.