

Imani Finkley

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SUMMARY

Extensive experience in applied machine learning, data science, and communications for software development and AI research

EDUCATION

Cornell University | Ithaca, NY | B.A., Summa Cum Laude

2020-2024

Honors Thesis: “By AI: Authorship, Literature, and Large Language Models”

Relevant Courses: Information Retrieval; AI Practicum; Language Revitalization; Text Mining for History and Literature; Data Structures & Functional Programming; Object-Oriented Programming and Data Structures; Discrete Mathematics; Linear Algebra

Danish Institute for Study Abroad | Copenhagen, Denmark | Computer Science (Game Development)

Jan 2023-May 2023

PROJECTS

Global EdQuest | [App](#) | [GitHub](#) | *Backend Engineer*

Mar 2024-May 2024

- Collaborate in 5-person team to develop a curated study abroad program recommendation web application
- Train, test, and implement a random forest binary classifier for sentiment analysis on 1K+ study abroad program reviews and user input queries

Bias in Machine Translation | [GitHub](#) | [Presentation](#) | *Project Manager*

Aug 2022-Dec 2022

- Manage a 5-person team to develop project proposal and development plan with Confluence and Notion
- Analyze gender bias in 3 mainstream models — Google, Amazon, and Microsoft — through 800+ English-Arabic and English-Spanish translations of job occupations as listed by the U.S. National Labor Bureau

SPECIALIZED SKILLS

Programming Languages/Libraries: Python, PyTorch, NumPy, Scikit-learn, JAX, FLAX, Java, HTML, C#, OCaml, OpenCV

Tools/Frameworks: GitHub, Google Collab, Jupyter Notebook, Unity, Google Cloud, Flask

Foreign Languages: Mandarin Chinese (Advanced Working Proficiency), Danish (Beginner Proficiency)

PROFESSIONAL EXPERIENCE

Computational Linguistics Research Fellow | *University of Maryland* | College Park, MD

Aug 2024-Present

- Conduct computational linguistics research focused primarily on linguistic decisions in large language models
- Mentored by Naomi Feldman

Teaching Assistant | *Cornell University* | Ithaca, NY

Jan 2024-May 2024

- Advise students in developing experiments, data collection, and implementing advanced NLP systems
- Grade projects and host biweekly 1-hour office hours for 15-student course, Advanced NLP for Humanities Research

Communications Assistant | *Cornell University* | Ithaca, NY

Sep 2023-May 2024

- Assist in development of press releases along with print, digital, and web content
- Compose monthly newsletter that communicates diversity, equity, inclusion, and belonging efforts and engagement opportunities in the Ann S. Bowers College of Computing and Information Science
- Create stories, strategies, and promotional materials for multimedia channels and social media platforms with Canva

Visiting NLP Researcher | *Johns Hopkins University* | Le Mans, France

Jun 2023-Aug 2023

- Design a PyTorch library version of the Lattice-based Speech Transducer JAX library to demonstrate the benefits of weighted finite state transducers with end-to-end pipelines with real-use speech processing applications with Ehsan Variani
- Research JAX/FLAX and PyTorch APIs to maintain comparable functionality and 32% improvement in system usage

Computer Vision Researcher | *Brown University* | Providence, RI

Jun 2022-Aug 2022

- Develop machine learning model for language-based image-to-image domain translation in Python with Daniel Ritchie
- Adapt image-to-image translation pix2pix model architecture and pre-trained text-image embedding model
- Train and test using Visual Computing Lab computing cluster and Google Cloud

Course Consultant | *Cornell University* | Ithaca, NY

Jan 2022-May 2022

- Lead weekly 50-minute discussion sections for 20 students to review their understanding of discrete mathematics
- Grade homework and exams at least once a week in 2-hour sessions for a roughly 280-student course, Discrete Structures

HONORS & AWARDS

Sphinx Head Honor Society | Cornell University

2024 Outstanding Researcher Award Honorable Mention | Computing Research Association | December 2023

2022 Dean's List Award for Academic Excellence | Cornell University | December 2022

2022 CMD-IT/ACM Richard Tapia Conference Scholarship | Cornell University | September 2022