

# Imani Finkley

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## SUMMARY

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

## EDUCATION

**Cornell University** | Bachelor of Arts with Honors, 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** | 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

**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 (INFO 4940)

**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 Bowers College of Computing and Information Sciences
- 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 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 (CS 2800)

## AWARDS

**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

**2021 Grace Hopper Celebration of Women in Computing Scholarship** | Cornell University | August 2021