Imani Finkley

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EDUCATION

University of Washington | Seattle, WA

Expected 2030

Ph.D. Information Science | Concentration: Data Science | Advisor: Melanie Walsh

Cornell University | Ithaca, NY

2020-2024

B.A. Literatures in English, Summa Cum Laude

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

Danish Institute for Study Abroad | Copenhagen, Denmark

Jan 2023-May 2023

Core Program: Game Development

RESEARCH EXPERIENCE

Research Fellow | University of Maryland | College Park, MD

Aug 2024-Present

- Advised by Naomi Feldman as 2024-25 Baggett Fellow in the University of Maryland Department of Linguistics
- Lead computational linguistics research focused primarily on input optimization for large language model longform text generation

Literatures in English Honors Candidate | Cornell University | Ithaca, NY

Aug 2023-May 2024

- Advised by Jane Juffer and Matthew Wilkens
- Analyze history of literary canon and the tradition of authorship in discussion with literary works produced by generative AI and large language models by applying literary and media theory concepts
- Study OpenAI's GPT 3.5 alongside university policy and social opinion on generative-AI authorship

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

Jun 2023-Aug 2023

- Participant in 2023 Jelinek Summer Workshop for Speech and Language Technology (JSALT) at the Laboratoire Informatique du Mans (LIUM) in Le Mans, France
- Worked under Ehsan Variani, Lucas Ondel-Yang, Ke Wu, and Sanjeev Khudanpur
- 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
- Research the JAX/FLAX and PyTorch APIs to maintain comparable functionality across libraries

Computer Vision Researcher | Brown University | Providence, RI

Jun 2022-Aug 2022

- Mentored by Daniel Ritchie
- Develop machine learning model for language-based image-to-image domain translation
- Adapt image-to-image translation pix2pix model architecture and pre-trained text-image embedding model

Undergraduate Researcher | *Brown University* | Providence, RI (Remote)

Jan 2022-May 2022

- Mentored by Srinath Sridhar in exploreCSR: Socially-Responsible AI for Computational Creativity program
- Create and process 1600-image dataset using OpenCV methods for model training, testing, and validation
- Finetune cycleGAN model architecture for image translation of video game shots to photorealistic domain

Undergraduate Research Assistant | Cornell University | Ithaca, NY (Remote)

Feb 2021-Sep 2021

• Review, summarize, and analyze relevant literature and computational sustainable methodologies surrounding water resource management and planning to assist Patrick Reed in The Reed Research Group

POSTERS & PRESENTATIONS

By AI: Authorship, Literature, and Large Language Models

Presentation | Humanities Scholar Program Spring Research Conference | Ithaca, NY | May 3, 2024

Literature in the Age of Mechanical Reproduction

Presentation | Cornell University Department of Comparative Literature Theory Colloquium | Ithaca, NY | Feb 16, 2024

Final: Finite State Methods with Modern Neural Architectures for Speech Applications and Beyond

Presentation | Jelinek Summer Workshop for Speech and Language Technology (JSALT) | Le Mans, France | Aug 4, 2023

Language-Based Material Manipulation for Transforming Sketches into Images

Poster | Brown University Summer Research Symposium | Providence, RI | Aug 5, 2022

Poster | The Leadership Alliance National Conference | Hartford, Connecticut | Jul 29-31, 2022

Realizing the Forbidden West: Translating Gameplay into Hyper-realistic Action Shots

Poster | Brown University Computer Science Undergraduate Research Symposium | Providence, RI | May 5, 2022

PUBLICATIONS

How biased are text-to-image models? | *Medium* | Article | April 7, 2022 **Bias in ML: An Introduction** | *Medium* | Article | December 5, 2021

TEACHING & MENTORSHIP EXPERIENCE

Workshop Facilitator | University of Maryland | College Park, MD

Nov 2024-March 2025

- Volunteer facilitator for creative computing workshops with the University of Maryland African American Digital & Experimental Humanities (AADHum) Lab and Prince George's County Teen Action Group (TAG)
- Taught 20 high school students how to program a wearable tech product in Python in Mu Editor
- Designing a workshop to teach high school students to build small language models

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 seminar course, Advanced NLP for Humanities Research (INFO 4940)

Underrepresented Minorities in Computing (URMC) Mentor | Cornell University | Ithaca, NY Jan 2022-May 2024

• Provide tools, resources, and plans for social, academic, and professional development/opportunities for 2 international students in the Ann S. Bowers College of Computing and Information Science

Course Consultant | Cornell University | Ithaca, NY

Jan 2022-May 2022

- Lead weekly 50-minute discussion sections to 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 (CS2800)

LEADERSHIP EXPERIENCE

Underrepresented Minorities in Computing | Cornell University | *President*

Dec 2021-Dec 2022

- Preside over weekly 30-person executive board, oversee the activities of standing committees, and implement technical outreach community support initiatives for 80 on-campus members
- Maintain relationships with 10 existing corporate sponsors and established new relationships with 6 corporations

Cornell Data Science | Cornell University | *Cornell Bias Lab Project Manager*

Sep 2022-Dec 2022

- Create and manage project plans that align corporate sponsor and 5-person team goals that explore identity biases with(in) machine learning and artificially intelligent systems
- Present findings on 3 commercial machine translation models in "Bias in Translation" project

HONORS & AWARDS

GSEE Graduate Excellence Award | University of Washington | February 2025

Nancy J. Gershenfeld Endowed Fellowship in Special Librarianship | University of Washington | February 2025 Baggett Fellowship | University of Maryland | July 2024

2024 Outstanding Researcher Award Honorable Mention | Computing Research Association | December 2023 **Sphinx Head Honor Society** | Cornell University

2023 Joseph E. Connolly `72 Memorial Prize | Cornell University | May 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 Conference Scholarship | Cornell University | August 2021