Princess Sampson (they/she)

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RESEARCH TOPICS: Human-Computer Interaction, Human-Centered AI, Algorithmic Justice

EDUCATION

University of Pennsylvania · PhD in Computer Science

2022 - Present

- Human-Computer Interaction Group
- Advisor: Danaë Metaxa

Spelman College · BS in Computer Science with honors

2018 - 2022

PUBLICATIONS

Sampson, P., Encarnación, R., Metaxa, D. (2023). "Representation, Self-Determination, and Refusal: Queer People's Experiences with Targeted Advertising." FAccT.

Nias, J., **Sampson P.**, and R. Ogburu-Ogbonnaya. "Black Women's Experiences with Algorithmic Microaggressions." Mozilla Foundation. <u>Available here</u>.

Nias, J., L. Hampton, M. Ruffin, and **P. Sampson**. "Decolonizing Technologies for Preserving Cultural and Societal Diversity." CHI 2020 Engaging Race in HCI Workshop. <u>Available here</u>.

AWARDS & HONORS

GEM Fellowship	2022
Phi Beta Kappa	2022
Google Tech Exchange Scholar	2021
Crown Castle Opportunity Scholarship	2021
Booking.com Women in Tech Scholarship	2019
Spelman College Ethel Wadell-Githii Honors Scholar	2018 - 2022

TALKS

- "Where Do We Go from Here? A Fireside Chat with Dr. Safiya Noble" (2021, November). Spelman College, Atlanta, GA.
- "Internship Roundtable" (2021, March). Association of Computer Science Departments at Minority Institutions (ADMI) 2021.
- "tech + racial justice" (2021, March). Harvard Society of Black Engineers.
- "Hacking the Racial Bias in Artificial Intelligence" (2018, March). SXSW Interactive. Austin, TX.

RESEARCH EXPERIENCE

Adobe Research · AI Experiences Lab

Summer 2022

- Summer 2022 remote research scientist internship
- Conducted research in data storytelling, visualization, and human-computer interaction

Georgia Institute of Technology · Social Dynamics and Wellbeing Lab

Principal Investigator: Munmun De Choudhury, PhD

Fall 2021 - Spring 2022

 Applied machine learning techniques to Youth Risk Behavior Surveillance System (YRBS) dataset and conducted public health and social computing literature review

Spelman College · CODE Research Program

Principal Investigator: Erdi Kara, PhD

Fall 2021 – Spring 2022

• Completed training in mathematical foundations of machine learning; implemented linear regression and deep learning models for computer vision applications.

Spelman College, Mozilla Foundation · The Future is Intersectional Fellowship

Fall 2021 – Spring 2022

Collaboratively developed a white paper that centers Black women in the conversation on trustworthy AI

Morehouse College · Derricotte Research Group

Principal Investigator: Wallace Derricotte, PhD

• Contributed to development and maintenance of an open-source quantum chemistry Python package. Utilized software engineering skillset to publish package, reviewed relevant computational chemistry literature.

Spelman College · Spelbots

Fall 2018 – Spring 2021

Fall 2019 – Spring 2021

- Authored and taught Scratch-based introductory CS curricula for K-12 students in groups of 10-30
- Co-authored CHI 2020 workshop paper on decolonial technology

INDSUTRY EXPERIENCE

Etsy · Software Engineering Intern

NYC, Remote in Atlanta · Summer 2021

- Core Data Pipelines team writes and maintains critical shared data pipelines that power machine learning models, experiments, and analytics in search and recommendations.
- Utilized software development lifecycle and participated in Agile sprints
- Authored systems architecture design documents and project documentation; utilized internal build systems
- Programmed ApacheSpark jobs for a Google Cloud Services environment
- Migrated Scala source to ApacheSpark from Scalding

Amazon · Software Development Engineer Intern

NYC, Remote in Atlanta · Summer 2020

- Ads Engineering and Development org; the project was the creation of a native AWS data engineering workflow
- Programmed ApacheSpark jobs for AmazonEMR; generated features from a big data source to improve ad-targeting of
 machine learning models that impact all Amazon customers in the NA region
- Cross-collaborated with data science and machine learning teams on project specs
- Collaborated with mentors on an iterative code review approval process; averaged 3-5 revisions per review
- Authored systems architecture design documents and project documentation; utilized internal build systems
- Project handed off to teammates, future work continued in immediate team roadmap (invited for 2021)

Spelman College · Teaching Assistant

2019-2020 Academic Year

- Intro to C++ (Spring 2020), 10-student class
- Python II (Fall 2019), 10-student class
- Supplemented CS curriculum through peer instruction in programming language fundamentals, IDE literacy, and version control

Amazon · AFE Software Development Engineer Intern

Seattle, WA · Summer 2019

- Supply Chain Optimization Tech org; project was the visualization of predicted sourcing and landed costs
- Programmed React/Redux components and Spring webservices in an existing codebase using MVC architecture
- Collaborated with mentors on an iterative code review process; went from 9 to 2 revisions per review
- Authored design documents and project documentation; designed UI mockups and utilized internal build systems
- Final presentation to principal engineers and org VPs
- Project continued by full-time employee and utilized by business analyst teams

LEADERSHIP & SERVICE

The Blue Record Podcast · Director of Tech Ops

Spring 2021 – Spring 2022

- Founding member of the official student produced podcast of Spelman College, run by the Social Justice Fellowship Program
- Oversee technical aspects of podcast production by producing raw recordings, managing audio engineering/editing team, and approving web engineer site updates
- Publish episodes and monitor podcast analytics
- Facilitate growth of technical skillsets across a 20-person team
- Establish in-person and remote recording procedures and train team members on equipment usage

The Blue Record Podcast · Web Engineer

Spring 2020 – Spring 2021

- Maintain website and internal team tooling
- Assist director with technical decisions
- Contribute to conversation on the mobility of Black women in society through episode features and pitches

 Worked one-on-one with three 2nd-grade students using Book Nook to improve literacy skills at Tuskegee Airmen Global Academy

TECHNICAL SKILLS

Proficient: Java, JavaScript, Python, Scala, Git & GitHub, Package management, Squarespace, SEO, Creative Cloud Suite, Apache Spark

Working Knowledge: Swift, C, C++, SQL, Objective-C, XCode, Sketch, Amazon Web Services, Google Cloud Services Certifications: Oracle Certified Associate, Certified Agile Practitioner

Capabilities: Object-Oriented Programming, MVC Architecture, Data Engineering, Pair Programming, Testing & test-driven development, REST API systems, Database Design, Version Control, UI/UX Design