

Princess Sampson (they/she)

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Research interests: Human-computer interaction, social computing, algorithmic harm, machine learning, Black feminism, queer of color critique

EDUCATION

University of Pennsylvania · PhD in Computer Science 2022 – Present

- Human-Computer Interaction Group, advised by Danaë Metaxa

Spelman College · BS in Computer Science 2018 – 2022

- Departmental Honors, Magna Cum Laude

HONORS & AWARDS

GEM Fellow	2022
Fontaine Fellow	2022
Upsilon Pi Epsilon	2021
Phi Beta Kappa	2021
Google Tech Exchange Scholar	2021
Crown Castle Opportunity Scholarship	2021
Spelman College LINC's Scholar & Social Justice Fellow	2019 – 2022
Booking.com Women in Tech Scholarship	2019
Spelman College Ethel Wadell-Githii Honors Scholar	2018 – 2022

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

Fall 2019 – Spring 2021

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

- 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

PUBLICATIONS & PROJECTS

Publications

- Nias, J., **Sampson P.**, and R. Ogburu-Ogbonnaya. “Black Women’s Experiences with Algorithmic Microaggressions.” Whitepaper developed in partnership with the Mozilla Foundation. Available at: <https://foundation.mozilla.org/en/insights/mozfest-selman-college-blackpaper>
- Nias, J., L. Hampton, M. Ruffin, and **P. Sampson**. “Decolonizing Technologies for Preserving Cultural and Societal Diversity.” Extended Abstract selected for CHI 2020 Race in HCI Workshop. Available at: <https://drive.google.com/file/d/0B1hsy0-u96ieak1DM2lWaE5QQnluV1JJNS1ySU9LUTdjcVVR/view>

Projects

Analysis of Fan Reactions to Black TV/Film Characters in Online Fandom Communities

Spring 2021

- Collected data from fandom conversations on Twitter and Reddit concerning Black and white characters in action media. Analyzed this data for hate speech and sentiment to investigate the difference in sentiment and hateful or offensive fan discussions depending on character race.

Wheelmap

July 2019

- Implemented Alexa skill allowing physically disabled users to ask a voice UI whether a location is wheelchair accessible using data from Google Maps and an accessibility API. People's Choice Winner in Amazon Future Engineer Hackathon.

TALKS

- “Where Do We Go from Here? A Fireside Chat with Dr. Safiya Noble” (2021, November). Invited host for the Future is Intersectional: Black Women Interrogating Technology speaker series. Spelman College, Atlanta, GA.
- “Internship Roundtable” (2021, March). Invited panelist at the Association of Computer Science Departments at Minority Institutions (ADMI) 2021 Conference.
- “tech + racial justice” (2021, March). Invited panelist at Harvard Society of Black Engineers event.
- “Hacking the Racial Bias in Artificial Intelligence” (2018, March). Invited panelist at South by Southwest Interactive conference. Austin, TX.

WORK 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

Bonner Office of Community Service, Spelman College · Student Volunteer for SpelReads

Fall 2018 – Spring 2019

- 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