Savanah Barnes

Michigan State University (Honors College) – Dual Degree, B.S. Computer Science & Psychology; M.S. Computer Science

Minors: Cognitive Science, Philosophy, Environmental Sustainability Studies

PROFFESIONAL & TEACHING EXPERIENCE

NASA, Glenn Research Center — Summer 2021- Computational Data Science Intern

June 2021 - August 2021

Internship with NASA under the direction of Dr. C. M. Holloway and Dr. Sarah M. Lehman. The project will combine philosophy and software engineering to tackle questions pertaining to ethical artificial intelligence and trust in automated systems.

Kellogg Company, Battle Creek, MI — *Global Data Science Intern*

February 2023 - PRESENT

Created an R Academy to asynchronously teach data scientists R coding and practice. Also, an integral part of the PVT team – creating and refactoring machine learning code to forecast raw material sales.

Department of Computer Science, East Lansing, MI — *Graduate Teaching Assistant (GTA)*

August 2020/23 - May 2024

Co-facilitating a lab for CSE 231 (Introduction to Computer Science - 1) with 30+ students. I created and presented material and helped coordinate, develop, teach, and grade labs, homework, and exams. Additionally, I monitored the online class forum and made additional study materials based on student needs. Prior to becoming a GTA, I was an undergraduate teaching assistant for three years.

Interoperability Institute, Ann Arbor, MI — Instructional Design & Software Developer

February 2022 - November 2022

Created learning content based on health IT standards such as FHIR and HL7 for insurance companies and other health IT focused persons. I created a partial full-stack application with the goal of being a data donation portal. It created workflows and diagrams that included AWS services and a synthetic data generator.

NASA, Glenn Research Center — Summer 2021- Computational Data Science Intern

June 2021 - August 2021

Internship with NASA under the direction of Dr. Herbert Schilling, supporting the Aeronautics Research Mission Directorate. I researched graph databases and data visualization tools to create a full-stack application and prototype for the Convergent Aeronautics Solutions project, which was determined to be needed for immediate use. I participated in outreach events and presented my research and findings to both internal and external groups.

EDUCATION

Michigan State University, East Lansing— Bachelors (Honors) - Masters

August 2019 - May 2023/24

GPA: 3.9/3.8

Obtained two B.S. degrees with Honors in Psychology and Computer Science. Completed the MS program in Computer Science, with a Cognitive Science specialization and focus on intelligent systems.

PROJECTS & RESEARCH

Digital Humanities & Literary Cognition Lab: September 2023 - Present

Analyzing and modelling data from the Music and Narrative project using pattern recognition skills.

CIRTL - TAR Short Course: September 2023 - November 2023

Three-week short course on Teaching as Research.

Natural Language Processing/ Computational Social Science Lab: August 2020 - 2022

Undergraduate, interdisciplinary (CSE & PSY) thesis based on cognitive dissonance and climate change surrounding Twitter discourse in developed and developing nations, and a second dataset article.

Kellogg's Capstone: Fall 2022

Part of a team that created a full-stack application using R/Shiny for use as a "branding dashboard". The product took ADA & WCAG guidelines into account and allowed admin access. Using an SQL database to store materials, users could preview templates (.css), PowerPoints, and .pdfs directly in the application.

(931) 206-8456 barne329@msu.edu

Cognitive Scientist (19barsav.github.io)

SKILLS

- Java, C/C++, Python, R/RStudio/Shiny, ARM
- Mailchimp, Google Analytics
- Neo4j, Cypher, GraphQL
- •SQL/SQLite
- Keras & PyTorch
- Instructional Design

AWARDS

Questbridge College Prep Scholar and National Match Finalist -

Recognized as a distinguished scholar

Honors College Impact - Selected to be a part of a week-long leadership and volunteering project with the Honors College.

Michigan Council for Women in Technology Scholar – Awarded as a scholar and a volunteer through MCWT in 2019-2022. Additionally, I was selected as the 2022 Executive Summit student speaker.

GrizzHacks5 – Our team won Best Rookie Hack, Best Write-Up, and came in the Top Ten.

ACTIVITIES & LEADERSHIP

- Michigan Council for Women in Technology – (Member, Past Mentee, Speaker x2)
- Women in Engineering (Mentor & Member)
- Association for Computing Machinery (Member)
- Spartan Hackers (Outreach Coordinator)

RELATED COURSES

- Computer Architecture and Organization
- Algorithms and Data Structures
- Python, Java, C++, SQL
- Discrete Structures & Formal Language and Computability Theory
- Linear Algebra, Calculus 1 &
 2/ Physics 1 & 2
- NLP/Artificial

Intelligence/Genetic Algorithms/ Advanced Software Engineering (Graduate)