

## Education

Bachelor of Science in *Information Sciences* GPA: 3.86 Expected Graduation: Spring 2025

*University of Illinois at Urbana-Champaign, School of Information Sciences*

Relevant Coursework: Research Design Information Sciences, Applied Statistical Methods and Data Analytics, Reading & Writing Data, Community Innovation, Programming for Information Problems, Biostatistics.

## Research Interests

- Investigating the socio-economic implications of artificial intelligence and its intersection with marginalized communities.
- Exploring the advancements and impact of fitness technology on personalized health and wellness.
- Investigating and addressing the underlying causes of biases in machine learning models.
- Exploring the how sociohistorical histories of marginalized communities influence present ethnocentric behaviors.

## Research Experience

### Community Academic Scholar Researcher

2024-Present

*African American Family Stress and Resiliency Lab, Interdisciplinary Health Sciences Institute, University of Illinois at Urbana-Champaign*

Principal Investigator: Shardé Smith

- Partnered with a local organization (DREAAM) to create an assessment tool and design outreach measures to inform the development of culturally relevant programs and services Black youth and families in Champaign Urbana.
  - + Assist in the development and design a community strength assessment on the strengths and needs of Black youth and families in Champaign and Urbana.
  - + Identify community ambassadors for data collection.
  - + Review relevant and existing sociohistorical data about the experiences of Black families in Champaign and Urbana.
  - + Identify culturally relevant surveys, assessments, and interview questions.
  - + Design outreach and marketing strategies to engage participants.

### Undergraduate Research Assistant

2024-Present

*Community Data Clinic, School of Information Sciences, University of Illinois at Urbana-Champaign*

Principal Investigator: Anita Chan

- Conducted self-guided investigations into mass surveillance, gunshot detection technologies and their applications in communities of color within Champaign-Urbana.
  - + Conducted exploratory data analysis to identify patterns of disproportionality, spatial information, and hotspots of mass surveillance.
  - + Developed proficiency in data manipulation and interpretation to identify patterns and trends related to mass surveillance and demographic factors.
  - + Created a mapping resource for the community, showcasing relevant spatial information and surveillance technology coverage area's intersection with race.

### Agricultural Research Lab Assistant

2022-2022

*Entomology Lab, Entomology Department, Illinois Natural History Survey, University of Illinois at Urbana-Champaign*

Principal Investigator: Joseph Spencer

- Performed experimental procedures, conducted field surveys and observations, and collected accurate and reliable data.
  - + Performed a range of experimental procedures, meticulously following established protocols and utilizing scientific techniques and equipment, ensuring precise and reliable results.
  - + Conducted field surveys, detail-oriented observations, and controlled experiments by established protocols, meticulously documenting data collected and procedures to ensure reproducibility.

### Material Science Engineering Lab Assistant

2019-2020

*Energy Transfer Research Lab, Department of Mechanical Science & Engineering, Grainger College of Engineering, University of Illinois at Urbana-Champaign*

Principal Investigator: Nenad Miljkovic

- Chemical lab experimentation utilizing developed research techniques and equipment.
  - + Designed laboratory experiments, techniques, and protocols, gaining an understanding of research methodologies and experimental planning.
  - + Developed an environmentally sustainable experimental procedure that yielded equivalent results, reducing chemical waste leading to cost-effective and sustainable manufacturing solutions.
- Performed data collection through methods of observation, measurement, and analysis.
  - + Executed precise research data collection, proficiently conducted data entry, and conducted data analysis of experiment results, ensuring accuracy and reliability for informed decision-making.
  - + Developed advanced analytical skills in pattern recognition and inductive thinking to investigate and analyze datasets, identifying meaningful patterns and gaining insight to trends in the data to make informed decision-making and research advancements.
  - + Developed effective data visualization and written communication skills in conveying research findings through well-structured and informative research papers, providing clear dissemination of study outcomes to audiences.

### **Professional Experience**

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#### ***University of Illinois at Urbana-Champaign, College of Applied Health Sciences***

IT Assistant @ AHS IT Partners

2023-Present

- Assists College of Applied Health Sciences faculty with information technology problems.
  - + Software & hardware troubleshooting.
  - + Install, configure, and troubleshoot hardware and software.
  - + Monitor and maintain computer systems and networks.
  - + Set up accounts and user profiles.
  - + Provide system administration and maintenance.
  - + Respond to and diagnose technical hardware and software issues.

### **Projects**

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#### **Independent Study**

2022-Present

*Education (in)Equity Dependence on infrastructure and Contemporary Systems of Racial Segregation*

Advisor: Brandon Batzloff

This research project examines educational statistics of Champaign Unit4 Schools and the infrastructure of Champaign to provide valuable insights into statistical discrepancies present between city regions and aims to identify how it is related to education equity, with the goal of informing policies and practices that promote equity and equality for all children in the Champaign-Urbana area.

#### **Individual Household Electric Power Consumption Projection**

2024

Investigate and analyze the factors influencing electric power consumption in a household, developing a predictive model that accurately forecasts the global active power usage and its change on a daily, weekly, or monthly basis.

- Python
  - + Linear Regression
  - + Machine Learning

#### **Chicago Crime Social Network Analysis**

2024

Analysis investigating the network of crime occurrences in Chicago using the connections between geographic location and crime descriptions to reveal patterns and insights into the city's crime dynamics.

- Python
  - + NetworkX
  - + RegEx

### **Professional Memberships**

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- Society for the Social Studies of Science

2023-Present

## Conference Presentations

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### Oral Presentations

LeShoure, M., (2023, November). *Education (in)Equity Dependence on infrastructure and Contemporary Systems of Racial Segregation*, 4S 2023 Honolulu, Society for Social Studies of Science, Honolulu, HI

LeShoure, M., (2023, April). *Education (in)Equity Dependence on infrastructure and Contemporary Systems of Racial Segregation*, iSchool Student Research Showcase, Champaign, IL

### Poster Presentations

Abudayeh, R., LeShoure, M., (2020, February). *Two Phase Heat Transfer Enhancement*, Emerging Researchers National Conference in STEM: ERN, Washington, D.C.

Abudayeh, R., LeShoure, M., (2019, July). *Two Phase Heat Transfer Enhancement*, Illinois Summer Research Symposium, Champaign, IL

### Campus Involvement

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#### Black Business Network

2023-Present

*University of Illinois at Urbana-Champaign*

#### National Association for the Advancement of Colored People

2022-Present

*University of Illinois at Urbana-Champaign Chapter*

#### Marching Illini, Sousaphone

2021-2023

*University of Illinois at Urbana-Champaign*