

Skills

- **Focus areas:** Machine learning, computer graphics, program optimization
- **Programming languages:** C, C++, Python, R, x86 assembly language, JavaScript, TypeScript
- **Databases:** MongoDB, MySQL, PostgreSQL, BigQuery
- **Cloud services:** GCP, AWS
- **Other:** OpenGL + shader programming

Experience

ADJUNCT PROFESSOR OF MATHEMATICS, **Mercer County Community College**, West Windsor, NJ, August 2023-Present

- Teach multiple sections of the introductory statistics class at the college.
- Lecture, grade papers, and tutor students.

SOFTWARE DEVELOPER, **Savvy Marketers, LLC**, Princeton, NJ, March 2023–July 2023

- Contributed to the code base for a custom learning management solution (LMS) being developed by the company. Used React for the front-end and Node and MongoDB for the back-end.
- Designed and programmed marketing research surveys for large corporate clients using Decipher survey development software.

RESEARCH ENGINEER, **Mem Protocol, Inc.**, San Francisco, CA, May 2021–April 2022

- Designed and prototyped the architecture for a system for managing decentralized identity online.
- Managed a BigQuery database containing information about transactions on the Ethereum network. Wrote SQL queries to extract data for a social web application. Applied database optimizations to cut query times in half.

RESEARCH ASSOCIATE, **C2SMART, New York University**, New York, NY, August 2020–July 2021

- Devised a method to evaluate team effectiveness in New York State Department of Transportation (NYSDOT) projects by analyzing project outcomes, aimed at enhancing NYSDOT's resource allocation for improved statewide project results.

RESEARCH ASSISTANT, **Rutgers Infrastructure Monitoring and Evaluation Group, Rutgers University**, New Brunswick, NJ, June 2019–November 2019

- Utilized R for data processing and management of nationwide construction job bids from Bid Express, and contributed to research on bid price distributions and forecasting through comprehensive exploratory analysis and time series modeling.

RESEARCH ASSISTANT, **Alan M. Voorhees Transportation Center, Rutgers University**, New Brunswick, NJ, June 2018–July 2018

- Used R and the Elsevier Scopus API to collect two decades of abstracts from transportation journals, analyzed writing quality evolution over time, and assessed linguistic cohesion using the Coh-Metrix system after cleaning the data with R.

RESEARCH ASSISTANT, **School of Management and Labor Relations, Rutgers University**, New Brunswick, NJ, May 2018–May 2019

- Developed a Shiny web app with R to analyze US registered nurses' unionization trends using CPS data, offering users interactive exploration of union membership and contract coverage rates through ggplot visualizations.
- The application is currently available at: <https://smlr.rutgers.edu/content/nurse-unionization-data-tool>

Education

- **MS in statistics, Rutgers University**, New Brunswick, NJ (with honors)
September 2017–May 2019
- **BA in mathematics, Rutgers University**, New Brunswick, NJ (with honors)
September 2012–May 2016