

Jason Gumaer

<https://www.linkedin.com/in/jasongumaer/>
gumaerj@gmail.com | 845.242.7611

EDUCATION

INDIANA UNIVERSITY

MS IN DATA SCIENCE
Dec 2021 | Bloomington, IN

UNIVERSITY AT ALBANY

MA IN MATHEMATICS
May 2010 | Albany, NY

SUNY PLATTSBURGH

BS IN MATHEMATICS
May 2008 | Plattsburgh, NY

COURSEWORK

DATA SCIENCE

Applied Machine Learning
Database Technologies
Data Visualization
Statistical Analysis
Natural Language Processing
Optimization & Simulation
Data Science Consulting

MATHEMATICS

Actuarial Sciences
Nonlinear Programming
Probability Theory
Stochastic Optimization
Statistical Design
Logic and Reasoning

SKILLS

PROGRAMMING

Python • R • Wolfram • Matlab

TECH STACK

Git • Jupyter (Anaconda) • Linux
Docker • PyCharm

DATABASES

SQL • XML • MongoDB • Neo4j

DATA ANALYSIS

NumPy • Pandas • RStudio • Scrapy
BeautifulSoup • StatsModels

DATA VISUALIZATION

Tableau • shiny • ggplot2 • ArcGIS
Looker Studio • Plotly • Dash

MACHINE LEARNING

SciKit-Learn • NLTK • SciPy • PyTorch

PROFESSIONAL EXPERIENCE

INDIANA UNIVERSITY

STAFF DATA SCIENTIST & PROJECT MANAGER
February 2022 – June 2025 | Bloomington, IN

- Lead and managed 20 teams of graduate data science students every semester for the Data Science Master's Capstone course, working on problem from real-world sponsors.
- Sourced clients and scoped all data science projects for the Data Science Master's Capstone course from government partners, non-profits, businesses, and within IU.
- Developed and designed the front-end and back-end of a public facing dashboard for the Energy Justice Lab which tracks US utility disconnections of more than 300 electric and gas providers over different geographies using Dash, Leaflet, and IU's research cloud service, Jetstream.
- Created a dynamic heat vulnerability index using principal component analysis and designed a dashboard to highlight local heat climates for Richmond and Clarksville, Indiana.
- Provided the Theatre Department with a precise analysis of their lightning by processing data from their control boards which showed a 34% savings if they switched to new LED lighting.
- Built a clustering algorithm to determine sampling frames of US hospitals to analyze tele-critical care COVID responses for the US Army's Medical Research and Development Command.
- Worked with FEMA to develop a process to predict potential wildfire damage to activate Fire Management Assistance Grants (FMAG), which provides funding for local communities.
- Prototyped a way to process open emergency radio transmission transcripts to derive a summary of the call for Monroe County, Indiana.
- Performed geospatial, statistical analyses on every county in Indiana to identify socioeconomically disadvantaged communities.
- Managed the creation of a matching algorithm to pair new hires with mentors at the Indiana University Alumni Association.
- Prepared and presented reports for the Crisis Technologies Innovation Lab as well as wrote most of the grant proposals.

DUTCHESS COMMUNITY COLLEGE

MATHEMATICS INSTRUCTOR & PROGRAM CHAIR

Instructor August 2010 – August 2021 | Poughkeepsie, NY

Program Chair January 2017 – August 2020 | Poughkeepsie, NY

- Effective mathematics and statistics communicator, teaching all levels of mathematics from development to advanced calculus.
- Increased graduation rates for the mathematics program by 50% while total school enrollment numbers decreased by 15%.
- Developed and supervised program assessment and data collection to update the mathematics program to meet SUNY and accreditation standards.
- Provided the campus with colloquiums and talks on the use of mathematics in political science, government, and history.