Nandha Gopikannan

nagopi@iu.edu | (214) 548-7108 | nandhag29.github.io

EDUCATION & HONORS

Indiana University | Bloomington, IN *May 2025*
Bachelor of Science **GPA: 3.91**
Majors: *Luddy School of Informatics* – Computer Science, *College of Arts and Science* – Mathematics, Statistics | **Minors:** Music

- **Hutton Honors College:** Selected to engage on an intensive curriculum of honors-level liberal arts courses
- **Dean's Scholarship:** Granted the maximum scholarship for out-of-state students for outstanding academic achievement
- **IMC Prosperity Trading Talent:** Placed in the top 3% out of 8000+ teams and generated positive alpha by utilizing Python algorithmic market making and positional trading strategies such as mean reversion, pairs trading, Markov chains, and more
- **Forge Startup Weekend:** Invited to the largest student-run startup weekend in the Midwest featuring various student founders

Technical Skills: Python, Java, C++, React, Node.js, SQL, R, MATLAB, Risk Management, AI/ML, Excel, Access, Google Suite

Relevant Coursework: Data Structures and Algorithms, Data Analysis and Mining, Probability Theory, Differential Equations

EXPERIENCE

Indiana University Mathematics Department | Bloomington, IN *August 2023 – Present*
M118 Finite Math Undergraduate Instructor

- Collaborated with course instructors by assisting students in weekly lectures, fostering an inclusive learning environment.
- Provided valuable support through email correspondence and one-on-one tutoring in the Math Learning Center, contributing to improved student performance and course retention

UT Dallas Big Data Analytics and Management Lab | Dallas, TX *June 2021 – August 2021*
Research Intern

- Applied CAMEO codebook guidelines to annotate sets of political and current event statements by discerning tone, subject matter, and intended audience to create a reliable and accurate dataset for analysis
- Utilized Python to analyze the annotated datasets, including computing Fleiss and Cohen's Kappas to measure inter-annotator agreement to provide a machine learning model with sufficient data to analyze and annotate statements independently

Penns Valley Conservation Association | Remote *June 2021 – September 2021*
Summer Intern

- Revamped organization website with a more aesthetically pleasing design and streamlined navigation to enhance user experience
- Executed an effective email marketing campaign by leveraging the revamped website and two different CRM applications to promote organization initiatives to old patrons, resulting in securing 14+ sponsors and raising $8800+ for Crickfest 2021

ACTIVITIES

Rooha | Bloomington, IN *August 2023 – Present*
Co-Founder

- Pioneered a machine learning driven fashion app aimed to revolutionize the fashion discovery experience for users and creators
- Oversaw research and development by coordinating market research and analysis and conceptualizing core app functionalities
- Selected to join the Shoebox, IU's premier student startup incubator that provides invaluable resources to build a business

Department of Intelligent Systems Engineering Aerospace Systems Lab | Bloomington, IN *August 2023 – Present*
Undergraduate Researcher

- Developed a Python-based analysis and visualization tool for flight data from Unmanned Aerial Vehicles (UAVs)
- Converted existing MATLAB code base into Python, and created functionalities that perform basic spatial, aerodynamic, and power data analysis utilizing libraries like Pandas, NumPy, scikit, FlightCoach, and more

IU Autonomous Racing Team | Bloomington, IN *September 2023 – Present*
Planning Team Member

- Collaborated with fellow team members to develop a dual level race planner, enhancing the team's racing strategy by integrating local track insights and changes with optimal global race routes and objectives

PROJECTS

NBA MVP Prediction | *Python, Jupyter Notebooks, pandas, scikit-learn, BeautifulSoup, Selenium*

- Developed a complete end-to-end application to predict the NBA League MVP based on player, team, and game data
- Scraped data from basketball-reference.com using BeautifulSoup and Selenium, and organized data into a pandas dataframe
- Utilized scikit to create a Ridge Regression model, and used the model data to create a Random Forest machine learning model

Insurance Chatbot | *Java, Swing, JUnit*

- Developed an insurance chatbot to help improve and enhance the insurance sales process by shortening lead generation time
- Pitched the idea and working prototype to Aflac executives, receiving positive feedback and interest in potential implementation

INTERESTS

NBA Basketball	Singaporean Cuisine	Backpacking	Dominic Fike	Pokémon