Rakesh Krishnan

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Objective: Harness the power of data and analytics to drive solutions to climate change and societal challenges

EDUCATION

University of Michigan, Ann Arbor

Graduation May, 2025

B.S. in Data Science, Environment (Double Major), Undergraduate Honors Program

- 3.92/4.0 Cumulative GPA, 68 total credits, 100/120 credits by May 2024, 34 on ACT
- William I. Branstorm Prize Recipient: Awarded to freshmen who rank in the upper five percent of their class
- Past Classes: Programming & Data Structures (EECS 280), Calculus III (MATH 215), Economics (ECON 101),
 Data Structures & Algorithms (EECS 281), CS Pragmatics (EECS 201), Probability & Statistics (STATS 412)
- <u>Current Classes:</u> Linear Algebra (MATH 214), Web Systems (EECS 485), Statistical Computing (DATASCI 306)

WORK EXPERIENCE

BLUElab Metro September 2022 – Present

Team Member Ann Arbor, MI

- Developed and executed equitable solutions to engage the community to achieve full electrification of over 800 houses in Bryant, Ann Arbor while minimizing gentrification, benefitting over 3,000 local residents.
- Engaged in skill building workshops, including project planning, python, C++, and leadership workshops
- Collaborated with community leaders and A2Zero to build support for the electrifying project.

Montgomery County Green New Deal

July 2021 – June 2023

Intern, Activist Rockville, MD

- Organized multiple climate protests of hundreds of people and eloquently represented the internship program for the media interviewers of local news sites, magazines, and TV channels: Article 1, Article 2
- Created a video that brought in over \$2,000 in funding for the internship from people across the United States, and built relationships that have amassed \$1000s of dollars more in new donor funding.
- Gave a passionate five minute long speech about the intersectionality of climate change for hundreds of people, including Montgomery County Executives and Board Members, at a major University of Maryland event.

Bethesda Green June 2021 – May 2022

Intern, Environmental Leader

Bethesda, MD

- Managed and coordinated Bethesda's Teen Science Cafe Program by connecting with professionals, drawing in dozens of participants, interviewing prospective leadership, and setting the program up for continued growth.
- Lead in outreach efforts and created social media content covering the importance of renewable energy sources.
- Produced a fun, informative video series on renewable energy generation: Official YouTube playlist

Projects

- **NBA Team Creator:** Personal project written in C++ involving user interaction. The user drafts a team of NBA players from a vast pool and competes against an optimized, but fair computer generated team.
- **Metro Solver:** Personal project written in C++ where I built a connected database of the current metro stops and used Dijkstra's algorithm to find the shortest path between any two desired metro stations on the map.
- Classifier: Used machine learning and natural language processing with over 1,500 data sets from previous semesters to train a Naive Bayes Classifier that could categorize forum posts with about 88% accuracy.
- 3D Maze: Developed and implemented an optimized algorithm that solves 3D mazes of 20 million cubic units
- **Zombies:** Created an automated zombie defense game, involving the use of complex data structures.
- Euchre: Coded a simulation of a popular Michigan card game, and then created an AI that could also play it.
- Zoo: Developed and implemented fast and optimal algorithms to solve the Travelling Salesman problem.
- Bank: Built the internal structure of a bank, able to facilitate transactions, track fraud, and store user history.

SKILLS, AWARDS, & INTERESTS

- Skills: C++, Hindi, Git, Makefile, Shell Script, R, Python, SQL, HTML/CSS, Fast Learner, Arabic
- Awards: Certificate of Meritorious Service, NIH Career Development Certificate, Federal Asian Pacific American Council (FAPAC) Best Community Project Award
- Interests: Web Development, Social Justice, Mystery Novels, Media Production, Fitness, Psychology