Rakesh Krishnan

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

EDUCATION

University of Michigan, Ann Arbor

Graduation May, 2026

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

- 3.8/4.0 Cumulative GPA, 101/120 credits
- **Sophomore Honors Award:** Awarded for outstanding achievement and engagement in the Honors Program.
- William J. Branstorm Prize: Awarded to freshmen who's grades rank in the upper five percent of their class.
- James B. Angell Scholar Award: Awarded for 2+ consecutive semesters of earning only As in classes.
- Current Classes: Database Systems (EECS 484), Practical Data Science (EECS 398), Linear Algebra (Math 214)
- Past Classes: Calculus III (MATH 215), Web Systems (EECS 485), Data Structures & Algorithms (EECS 281)
 Probability & Statistics (STATS 412), Economics (ECON 101), Statistical Computing (DATASCI 306)

WORK EXPERIENCE

University of Michigan, Computer Science Department

August 2024- Present

Instructional Aide

Ann Arbor, MI

- Mastered challenging programming and C++ content, and 1 of 10 people selected from over 300 applicants.
- Taught a class of computer science students coding concepts in weekly 2 hour lab sections and office hours.
- Innovated upon current teaching methods to help students retain information and actively enjoy learning.

Department of Defense (USUHS)

June 2024 – August 2024

Data Science Intern

Bethesda, MD

- Managed and developed databases to optimize medical supply acquisition, resulting in thousands of dollars in savings, streamlined processes, and the top-quality instruction for over 500 medical students every year.
- Analyzed environmental impacts of military medicine practices and proposed sustainable improvements.
- Facilitated over 50 hours of real-life training activities for medical students.

Michigan Data Science Team

January 2024- Present

Project Team Member

Ann Arbor, MI

- Constructed an adaptive artificial intelligence model capable of playing the game "codenames" with over 85% accuracy in generating relevant clues through using python, the gensim library, and a word2vec model.
- Transformed complex data into compelling visuals using the power of the pandas and numpy python libraries.
- Mastered the use of linux, shell scripting, virtual environments, and git to streamline project development.

BLUElab Metro

September 2022 – Present

Team Member

Ann Arbor, MI

- Developed equitable solutions to promote full electrification of over 800 houses, benefiting 3,000+ residents.
- Participated in skill-building workshops, including Python, machine learning, data visualization and leadership.
- Engineered a solar-powered gazebo with lights and outlets to encourage green energy use.

Projects

- <u>InterviewerAI</u>: Leveraged Google Gemini 1.5 API in sync with a backend flask server and frontend react.js scripts to create an interactive interview app that provides tailored feedback on speech and facial expressions.
- Metro Solver: 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, and then provide organized directions.
- Insta485: Engineered a usable model of Instagram where you can login, post, follow, and view others' content.
- Classifier: Trained a Naive Bayes Classifier that could categorize forum posts with about 88% accuracy through the use of machine learning and natural language processing with over 1,500 data sets from previous semesters.
- **Bank:** Built the internal structure of a bank, able to facilitate transactions, track fraud, and store user history.

SKILLS, AWARDS, & INTERESTS

- Skills: C++, Git, Python, React, JavaScript, R, Shell Script, HTML/CSS, SQL, AWS, Makefile, Hindi, Adaptable
- Awards: Certificate of Meritorious Service, NIH Career Development Certificate, Federal Asian Pacific American Council (FAPAC) Best Community Project Award, AP Scholar with Distinction
- Interests: Web & Mobile Development, Social Justice, Mystery Novels, Media Production, Fitness, Psychology