

Pranav Tikkawar

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EDUCATION

Rutgers State University of New Jersey, Honors College

New Brunswick, NJ

Bachelor of Science in Computer Science, Mathematics, and Data Science

May 2027

- **GPA:** 3.84 / 4.0
- **Relevant Coursework:** Computer Architecture, Stochastic Processes, Calculus V, Math Theory of Statistics, Linear Algebra

PROFESSIONAL EXPERIENCE

AI Researcher/Data Architect at Muni Health

July 2024 - Present

- Utilized LLaMa3 Model and classifier and clustering models to develop an AI agent that aims to identify irregularities in a client's ambient health and take the most appropriate action to ensure our client's wellbeing
- Developed the internal data formatting files to optimally store client data in JSON format for the stream of data we receive from clients as well as ensuring patient confidentiality is protected from potential data leaks
- Guided a team of 4 interns to generate over 10,000 entries of synthetic data by carefully curating multiple FDA-verified health datasets combined with client data to train the initial model of Muni Health

Team Lead/Data Analyst at Metro Analytics/Rutgers MBS Externship Exchange

June 2024 – August 2024

- Created detailed process maps in Microsoft Visio to identify and outline potential flaws and oversights in safety within airport environments
- Conducted thorough analysis of various airport agencies, including TSA and CBP, to understand their roles and improve their effectiveness in enforcing security measures
- Coordinated efforts between our team and industry professionals promptly to get key insight into the inner workings of secure airport agencies

LEADERSHIP EXPERIENCE

General Assembly Head Chair at Rutgers Association of International Relations

September 2023 – Present

- Organized a General Assembly mock conference for the delegation to individually hone each delegate's skills through personal feedback and positive reinforcement
- Taught comprehensive and effective debate skills to fellow delegates, empowering them with the tools necessary for impactful contributions in their future collegiate conferences
- Developed a 20+ page background guide on the importance of infrastructural developments as the solution to food and how facilitating peaceful transfer of power in historically colonized countries leads to further development in technology

Sewa/Volunteering Chair at RU Hindu Student Council

September 2023 – Present

- Organized potential volunteering events for a variety of students on campus to improve the Rutgers New Brunswick campus and surrounding areas, through a variety of initiatives
- Introduced a biweekly audience of 40-50 students to a wide array of religious practices in Hinduism and ways they can deepen their spirituality and mindfulness
- Increased student engagement by over 15% by providing a more hands-on framework on including more students from different backgrounds in the activities of the club

PROJECTS

Mathematics Large Language Model Research

July 2024 - Present

- Developed an LLM to be able to better solve probability-based proofs by creating a model that converts textbooks into training data to train a more general LLM as a research buddy
- Generated a dynamic synthetic data generator to create a series of training data that takes in high-level mathematics papers by adjusting the spontaneity of multiple responses

Optimized Course Registration Portal

August 2024 - Present

- Developed a relational database from the data generated from the Rutgers Schedule of Classes to create a full-stack application that makes navigating course registration more accessible
- Created a proprietary “difficulty” rating for each Rutgers class, degree, and professor through the public SIRS ratings as well as the data from the Degree Navigator and Web Registration Portal
- Included a Course Sniper Feature to provide a way for students to ensure they get their classes even if the current section of the course is filled by sending them near immediate emails with registration when the class opens

Stochastic Calculus Application in Finance

May 2024 – August 2024

- Created a presentation on how Martingales and Brownian motion contributes to the theory of the Black-Scholes Model and the potential pitfalls of the model itself
- Researched the theory of Stochastic Calculus through the Rutgers Directed Reading Program with a graduate math student to discover a technical approach to finance and options valuation

SKILLS, ACTIVITIES & INTERESTS

Technical Skills: Java, Python, R, MATLAB, Flask, HTML, CSS, JS, SQL, LaTeX, Excel,

Activities: USACS, Quantitative Finance Club, Academic Tutoring, Data Science Club,

Interests: Live Music, I play Drums/Guitar/Bass. Data Analytics, Debate, Esports,