

# Sai Ruchit Kumar

Computer Science Graduate

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## EDUCATION

**Master's in Computer Science** Sep 2023 - May 2025  
**NJIT - Ying Wu College of Computing** Newark, NJ

- Cumulative GPA: 3.5/4.0
- **Relevant Coursework:** Operating System, Database Management System, Data Analysis with R, Web System Development, Data Mining, Machine Learning, Artificial Intelligence, Data Structures & Algorithms, Corporate Finance, Java Programming

**Bachelor's in Computer Science** May 2019 - Aug 2023  
**Vellore Institute Of Technology** India

- CGPA - 8 out of 10
- Relevant coursework: **Machine Learning, Artificial Intelligence, Data Mining and Warehousing, Database Management Systems, Operating Systems, Algorithms and Data Structures, Software Engineering**
- Completed hands-on projects, including **Stamp Detection using CNN** for image recognition.

## ACADEMIC PROJECT

- **Chat Application using Django**  
*Why:* To facilitate seamless real-time communication with user authentication and message history.  
*What:* Developed a responsive chat application to enhance user interaction and messaging efficiency.
- **Credit Card Approval Rate Analysis**  
*Why:* To predict the likelihood of credit card approval based on applicant financial and demographic data.  
*What:* Built a machine learning model using logistic regression and decision trees to analyze key factors affecting credit approvals, enhancing financial institutions decision-making efficiency.
- **Advanced Multi-threaded Task Scheduler in OS**  
*Why:* To optimize CPU resource allocation and process management for improved system performance.  
*What:* Designed and implemented a task scheduler using multi-threading for efficient task execution.
- **Stamp Detection using CNN**  
*Why:* To improve automated recognition of postal stamps for efficient sorting and archival processes.  
*What:* Built a deep learning model using Convolutional Neural Networks (CNN) for high-accuracy image classification.

## INTERNSHIP

**Data Science Intern** Jul 2022 - Jul 2023  
**Corizo.co** Newark, NJ

- Utilized Supervised and Unsupervised Learning techniques to enhance **red wine quality detection** in ML and AI projects addressing real-world problems
- Engineered and deployed **classification and regression predictive models** to uncover insights and patterns in data
- Enhanced prediction accuracy by **15%** in the Red Wine Quality Detection project through the application of **Decision Trees, Random Forest**, and **Support Vector Machines (SVM)** on physicochemical properties like acidity levels ,enabling informed decisions in quality control operations

## KEY SKILLS

**Programming Languages:** Python, R, SQL, Java, HTML, CSS, JavaScript  
**Frameworks & Tools:** Django, Power BI, MySQL, RStudio, Excel  
**Data Science & Machine Learning:** Data Mining, Statistical Modeling, Supervised & Unsupervised Learning, Logistic Regression, Decision Trees, SVM  
**Artificial Intelligence:** Neural Networks (CNN), Natural Language Processing (NLP)  
**Database Management:** MySQL, Database Design & Optimization  
**Data Visualization & Reporting:** Power BI, Excel

## LEADERSHIP EXPERIENCE

**Taekwondo Junior Team Coach**  
Andhra Pradesh State Team, National Taekwondo Tournament, India | Feb 2023

- Mentored junior athletes, preparing them for national-level competitions.
- Guided the team through competitions, focusing on both physical and mental preparedness.

## EXTRACURRICULAR ACTIVITY

- Student Member of SANSKAR| NJIT - Ying Wu College of Computing | Jan 2023 - May 2025