

# Tanmay Rajesh Bhardwaj

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## EDUCATION

**Syracuse University** - College of Engineering & Computer Science, Syracuse, NY

August 2022 - May 2024

### Master of Science in Computer Science

• Coursework : Design and Analysis of algorithm, Intro to Artificial Intelligence(Python), Intro to Machine, Learning(Julia), Computer Architecture, Social Media and Data Mining(Sentiment Analysis), DBMS(SQL), Streaming Algorithms(Big Data Algorithms).

## EXPERIENCE

**Data Analyst**, Maxwell School of Citizenship @Syracuse University – Syracuse

January 2024 - Present

- Leveraging **Python**, **Pandas**, and **NLTK** to conduct **topic modeling** analysis on Reddit data, aiming to uncover administrative burden of U.S. social programs, with a focus on Supplemental Nutrition Assistance Program (SNAP).
- Analyzing over **10,000 Reddit posts** to identify key themes related to administrative challenges and user experiences of the SNAP program, contributing to a comprehensive understanding of its operational impact and areas for improvement.

**Software Developer Intern**, FLOW | Austin - Texas – United States

June 2023 - August 2023

- Engineered a **CRM Manager** by merging **Django** and Salesforce's **REST APIs**, simplifying bulk data CRUD operations for various client-specific Salesforce layouts.
- Created new desktop app for users, testing & debugging backend codes for 4 projects, applying **MySQL** and **C#**; collaborated with Database Developer, suggesting APIs to be used for back end code processing. Developed and maintained **CI/CD** pipelines using **Jenkins**, facilitating automated builds, tests, and deployments, significantly reducing manual intervention and deployment times.

**Software Developer**, TIBCO – Pune – India

September 2020 – July 2022

- Upgraded TIBCO's client service efficiency by diagnosing and rectifying defects, as well as enhancing plugins for **ActiveMatrix Businessworld** (v5 and v6), **SAP**, Kafka, Amazon SQS, and SNS, boosting client responsiveness and satisfaction.
- Implemented a data-driven strategy by utilizing TIBCO **Spotfire**, **Odata**, and Google Sheets, achieving a **23%** decrease in issue resolution time and elevating client satisfaction through precise and efficient problem-solving.
- Led and coordinated a team of 4 interns, managing product requirements, roadmap, milestones, and deliverables for various TIBCO products, ensuring smooth project outcomes and timely delivery. Managed Oracle and PostgreSQL databases, optimizing SQL queries and procedures, which improved data retrieval times by up to 50%.

## PROJECTS

**Streaming Data Preprocessor | Python, Numpy**

October 2023 - November 2023

- Engineered a Python-based streaming data processor utilizing **Count-Min Sketch**, enabling rapid approximation of item frequencies and revenue estimations within large-scale e-commerce datasets(around **1 million rows**).
- Implemented CSV data import functionality and designed methods for accurate frequency queries, **heavy hitter detection**, and average revenue calculations, boosting data analytics efficiency.

**Anime Recommendation System** [Github](#) **Python, Machine Learning**

April 2023 - May 2023

- Developed a **collaborative filtering**-based anime recommendation system operating Python and the Surprise library, implementing the **Singular Value Decomposition** (SVD) algorithm.
- Devised a tkinter-based GUI with autocomplete, improving UX by suggesting anime names from a **200K-row** dataset as users type, enhancing search efficiency. Handled and processed rating data, including replacing missing values and transforming user ratings into numerical formats to **75%** increase in data completeness and algorithm effectiveness.

**Sensor Data Visualization - Android**

February 2023

- Developed an **Android application** for real-time plotting of sensor values, including mean and variance, enhancing user interaction and data readability.
- Engineered a custom view to plot sensor data against time, incorporating features like running mean and standard deviation to provide insightful analytics. Integrated animations reflecting sensor value changes, facilitating an intuitive understanding of environmental or device state changes based on sensor readings.

## SKILLS

- Programming Languages - Python, Java, R, C, C++, HTML, Javascript, Android.
- Database - MySQL, Oracle, PostgreSQL.
- Frameworks and Technologies - Django, Spring Boot, multithreading, opencv, tkinter/pyqt, numpy, pandas, tensorflow, Stata, Agile, MVC, MVVM, Gradle, Jenkins, Jmeter, Selenium, Azure, CI/CD, Angular, Vue, React, HTML, CSS, distributed database, Git, Github, Gitlab, Postman, AWS, EC2, S3, RDS, Android open source project, Gradle, Android Studio, maven.