

# Mitalee Minde

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## EDUCATION

**University of Massachusetts Amherst** | *Masters of Science in Computer Science* *Expected Graduation: May 2024*

- Relevant Courses: Machine Learning, Systems for Data Science, Business Intelligence and Data Analytics, Natural Language Processing, Algorithms for Data Science, Statistics

**University of Mumbai, India** | *Bachelor of Engineering in Computer Engineering* *GPA : 8.81 / 10, Jun 2015-May 2019*

- Relevant Courses: Operating Systems, Data Structures, Advanced Algorithms, Object Oriented Programming, System Design

## SKILLS

**Languages/ Web Technologies:** Python, Java, C, Gherkin, Javascript, PHP, HTML, CSS, REST Apis

**Machine Learning Tools/Libraries:** Numpy, Matplotlib, Pandas, Sklearn, Seaborn

**Frameworks/Databases:** RESTAssured, Flask, Django, MySQL, PostgreSQL, Redis, SparkSQL

**Cloud Technologies/Others:** AWS (EC2, S3), Bitbucket, Git, Kafka, Kibana, Postman, Jenkins, Agile, MapReduce, Spark, Docker

## WORK EXPERIENCE

**Paytm** | *Senior Software Engineer* *Jul 2020 – May 2022*

- Contributed to the end-to-end creation and testing of the revamped chat architecture and APIs (including user creation, chat channel creation, message sending, announcement messaging, and push notifications) to improve app performance by ~**40%**.
- Built a low-latency, high-throughput, event-based distributed system supporting **100M** business messages per day using Kafka.
- Developed automated data cleaning, updating, and log analysis using Python libraries, which reduced manual effort by ~**60%**.
- Automated chat-channel creation using Python during IPL matches, eliminating **100%** of manual effort.
- Spearheaded the integration of Paytm-Chat APIs with multiple parallel teams, including Paytm for Business and Paytm Money, resulting in an increase of ~**30%** in customer satisfaction.
- Produced and implemented an API automation framework using end-to-end testing, reducing manual testing by ~70%.
- Led daily sync-ups to achieve Scrum goals, and prepared and mentored three new employees in Automation Testing.

*Technologies: Python, JAVA, RESTAssured, MySQL, REST Apis, Postman, Numpy, Pandas, AWS, Bitbucket, Kibana, Kafka, Redis*

**Betmount** | *Data Analyst Intern* *Jan 2020 - May 2020*

- Interacted closely with founding members of the company and extrapolated user engagement data to perform analysis and provided insights to augment user engagement by ~ **40 %**.

*Technologies: Git, Python, MySQL, Pandas, Numpy, Matplotlib*

**Tata Consultancy Services Limited** | *Assistant System Engineer* *Aug 2019 – Dec 2019*

- Worked closely with other developers, business and system analysts, and was part of Microsoft Business Unit to research, understand and manage the existing software used by the client to provide support to the client's system.

*Technologies: C#, Python, Azure, Biztalk*

## PROJECTS / PUBLICATIONS

### System for Click Through Rate Predictions

- Streamed data using cron jobs and distributed it via Kafka for parallel processing, achieving an average latency of **0.02 seconds**.
- Performed data pre-processing using Spark, resulting in a pre-processed dataset of **1.2GB** size, which was stored in MySQL.
- Prepared a machine learning model using CatBoost on Decision Trees, achieving an accuracy of **84.3%**.
- Developed a lambda function that retrieved pre-processed data from the database and made predictions using the stored pickle file. The function achieved an average prediction time of **0.02 seconds**.
- Stored the prediction results in the database, resulting in a dataset of **900MB** size. Conducted analytics on the dataset using Tableau and Excel, generating **4** visualizations to showcase the results.

*Technologies: Python, ML, AWS (S3, Lambda Function, EC2, IAM), MySQL Apache kafka, RFR, Tableau, Excel, Docker*

### Supply and Demand Regulation System for Agriculture-Products

- Scraped and preprocessed data from government websites using Python, resulting in a **3GB** dataset as input for the ML model.
- Established an architecture that predicted crop demand and prices using the **Random Forest Regression algorithm**, achieving an accuracy of **76%**. The system provided crop recommendations to farmers based on the algorithm derived from data analysis.
- Trained Tesseract **OCR** with different fonts from documents to fetch details from farmers' land documents and Aadhar cards, achieving an accuracy of **84%**.
- Created an **API** that provides multi-language support (Hindi, Marathi, and English), making the system more accessible
- Publications: International Journal of Agriculture Innovations and Research, November 2019

*Technologies: Python, ML, HTML, CSS, PHP, JavaScript, RFR, Tesseract OCR, REST, Flask*

## LEADERSHIP & EXTRACURRICULAR

- German Language Certification from Goethe Institut (levels completed - A1, A2, B1)
- Technical Creative Head and Editor for Computer Science Society Chapter, Datta Meghe College of Engineering
- Teacher's Assistant : Coached 25 students in PHP