

Mitalee Minde

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EDUCATION

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

- Relevant Courses: Software Engineering, Machine Learning, Systems for Data Science, Natural Language Processing, Algorithms for Data Science, Statistics

University of Mumbai, India | *Bachelor of Engineering in Computer Engineering* *Jun 2015-May 2019*

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

SKILLS

Programming Languages : Python, Java, Gherkin, Javascript, Typescript PHP, HTML, CSS
Frameworks : RESTAssured, Flask, Django, Angular, REST Apis, Karma, Jest, Jasmine
Databases : MySQL, PostGreSQL, Redis, SparkSQL, Elasticsearch
CI/CD Tools : Jenkins, Git, Bitbucket, JIRA, Confluence, Agile
Cloud Technologies/Others : AWS, Kafka, Kibana, Postman, MapReduce, Spark, Docker

WORK EXPERIENCE

Advisor360 | *Software Engineer Intern* *Jun 2023 - Present*

- Developed a tool for facilitating smart search of Angular components within a repository (with options to filter by file type, export to excel) resulting in an **80%** reduction in developer and product communication time and increased independence.
- Revamped custom Angular components (button, text editor) to be used by different teams within the Advisor360 ecosystem.
- Enhanced product quality by resolving client-reported bugs, implementing requested feature changes, ensuring a smooth user experience and meeting client requirements.

Technologies: HTML, CSS, TypeScript, Javascript, Angular, Python, Docker, Karma, Git, Bitbucket, Jenkins, REST Apis

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

- Contributed to the end-to-end creation 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** payment messages per day using Kafka.
- 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 acquisition.
- 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.
- Designed and implemented an API automation framework which reduced manual testing by **~70%**.

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

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

- Performed data analysis by extrapolating user engagement data and provided insights to increase user engagement by **~40 %**.

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

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

- Resolved Biztalk application bugs and provided support to clients software improving the product's performance.

Technologies: C#, Python, Azure, Biztalk

PROJECTS / PUBLICATIONS

Mental Health Dialogue System using Prompt Based Learning

- Collected data from mental health books and created a document based datastore using Haystack that utilizes elasticsearch.
- Implemented a DPR retrieval system for providing context to knowledge grounding chatbot for answering mental health related questions by using prompt engineering on GPT3 and provided UX using Angular.

Technologies: Python, NLP, LLM GPT3, Haystack, DPR, Angular, HTML, CSS, Typescript

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**.
- Prepared a machine learning model using CatBoost on Decision Trees, achieving an accuracy of **84.3%**.
- Developed a lambda function for retrieving pre-processed data from the database and making predictions using the stored pickle file. The function achieved an average prediction time of **0.02 seconds**.

Technologies: Python, ML, AWS (S3, Lambda Function, EC2, IAM), MySQL Apache kafka, RFR, 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.
- Publications: International Journal of Agriculture Innovations and Research, November 2019

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

EXTRA AND CO-CURRICULAR

- German Language Certification from Goethe Institute (A1, A2, B1)