

Ameya Nandakumar Potey

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EDUCATION

The University of Texas at Dallas

Master of Science, Computer Science (3.9/4.0)

May 2023

Dallas, TX

National Institute of Technology

Bachelor of Technology, Engineering

Jul 2018

Tiruchirappalli, India

TECHNICAL SKILLS

Graduate Coursework: Design & Analysis of Algorithms, Machine Learning, Big Data Management & Analytics

Programming Languages: Java, Python, C, C++, SQL, TypeScript, JavaScript, Bash, HTML, CSS

Tools and Frameworks: React, Angular 11, Node.js, MySQL, SpringBoot, Kafka, MongoDB, Git, Jenkins, Spinnaker

Machine Learning Libraries: NumPy, pandas, Scikit-Learn, TensorFlow, Matplotlib

WORK EXPERIENCE

Software Engineering Intern

Jan 2022 – Aug 2022

Copart, Inc.

Dallas, TX

- Implemented modules for the event-driven framework and its execution engine for the Member microservices for enhancing the overall payment lifecycle and improving the user payments and refunds interface.
- Helped streamline currency conversion process for payments made across currencies, reducing currency-conversion related issues in production by over 10%.
- Handled new business scenarios by improving existing functionalities and enhanced fraud prevention by about 15% by refactoring the existing codebase.

Software Development Engineer

Jul 2018 – Dec 2020

Citicorp Services India Pvt Ltd.

Chennai, India

- Abstracted inter-application communication by building a unified inter-platform messaging microservice, capable of communicating across multiple messaging protocols like EMS, MQ, Kafka and gRPC.
- Improved the response time and latency diagnosis in database intensive applications at Citi by upwards of 24% by developing a dashboard for monitoring the vital performance metrics of stored procedures.
- Reduced data mismatch across the involved FX sales systems by over 80% by reconciling data from multiple sources into a single pipeline.
- Achieved a 20% system latency reduction by redesigning the front-end of Citi's Global Data Mining Engine by reformatting data visualizations and streamlining data flows.

KEY PROJECTS

Recurrent Neural Networks for Machine Translation ([GitHub](#)) | *Python, TensorFlow*

Nov 2021

- Designed and built an encoder-decoder RNN framework from scratch to perform linguistic translations.
- Trained the RNN model to perform English-French sequential translations on 10% of the WMT'14 en-fr dataset.
- Reduced the initial training and test losses by over 32% by optimizing the model construction and tweaking the model's hyper-parameters.

Bed and Breakfast Web Application ([GitHub](#)) | *Node.js, React, MongoDB*

Oct 2021

- Developed a full-stack hotel management system, allowing users to view, search, filter and book hotel rooms based on individual requirements; Implemented booking history for the users to check their past activity.
- Supported CRUD operations for the admin user by interfacing with MongoDB, also implemented session management for all users using web authentication tokens.

Database Engine ([GitHub](#)) | *Java*

Jul 2021

- Built a console-based RDBMS (Relational Database Management System) supporting Insert, Select, Update and Delete table commands and all the basic MySQL datatypes.
- Implemented a file-per-table storage paradigm for each table, further dividing tables into pages based on the column datatypes.

Contacts Application ([GitHub](#)) | *Node.js, React, PostgreSQL*

Jun 2021

- Developed a full-stack web application for storing and managing contacts that interfaced with a Postgres database allowing users to perform CRUD operations.