

# ROHIT MOHANTY

Providence, RI, USA

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## Academics

Master of Science (ScM) in Computer Science at Brown University, RI

Aug 2021 - May 2023

Bachelor of Technology in Electrical and Electronics Engineering at IIIT Bhubaneswar, India

Aug 2013 - June 2017

## Technical Skills

<b>Languages</b>	C++, Python, C, JavaScript, Java, Shell script	<b>OS</b>	Windows, Mac, Linux
<b>Web</b>	REST API, SOAP, AJAX, HTML5, CSS, D3.js	<b>Libraries</b>	React, Scikit-learn, TensorFlow, Keras, PyTorch
<b>Frameworks</b>	.NET, Flask, OpenCV, Angular, NodeJS, Hadoop, Kafka	<b>Databases</b>	DynamoDB, AWS Timestream, MongoDB, Redis,
<b>Cloud</b>	AWS Lambda, Pivotal Cloud Foundry, Serverless		MS SQL Server

## Work Experience

Cumulus Digital Systems, MA, USA

Software Development Intern (Team size-16)

May 2022 – Aug 2022

### Timeseries Performance Boosting

**Highlights:** Improved the performance of the client-facing applications by exploiting the timeseries structure of their data and deploying them to AWS Timestream.

**Technologies Used:** NodeJS, JavaScript, AWS Timestream, AWS DynamoDB, TypeScript, Flow, Serverless, AWS Lambda, AWS CloudFormation, AWS CodePipeline, GitHub Actions, GraphQL, Jest, ESLint

#### Roles and Responsibilities:

- Improved the performance of client-facing applications by 180% by using AWS Timestream to exploit the timeseries structure of the data and using multithreading and caching in writes and queries.
- Wrote JavaScript code to implement various critical backend services and deployed them to AWS CodePipeline using GraphQL, AWS Lambda, serverless framework and GitHub Actions. Implemented various testing packages using Jest for unit testing and integration testing of the code.

### Column Name Matching and Generation

**Highlights:** Implemented an NLP solution for matching and generating company-based column names for user-defined column names.

**Technologies Used:** Natural Language Processing, Word2Vec model, LSTM, RNN, Seq2Seq, Transformers, NumPy, Pandas, TensorFlow, Keras

#### Roles and Responsibilities:

- Implemented a word2vec NLP model using LSTM to match user-defined column names with company-based column names.
- Used a multi-headed attention transformer to implement a Seq2Seq model to generate new company-based column names based on semantics.

Aastha Rehabilitation Center, India

Senior Manager (Team size-20)

Oct 2019 – Apr 2021

**Highlights:** Led a team in this government-funded NGO focused on the welfare of less fortunate in the tribal belt of the state of Jharkhand in India.

#### Roles and Responsibilities:

- Organized 5 health check-up and dental check-up camps and led the team responsible for rehabilitation of handicapped children.

Dell, India

Software Development Engineer (Team size-10)

July 2017 – Sept 2019

**Highlights:** Worked for the Dell Federal Business Enablement Team that enables the end-to-end fulfilment of orders for US Federal Government.

**Achievements:** Dell Champions Award

**Technologies Used:** Python-Flask, Siebel CRM, SOA, Pivotal Cloud Foundry, React, C#, .Net, NodeJS

#### Roles and Responsibilities:

- Improved performance of middleware by 84% by implementing critical SOA services in Python and migrating them to Pivotal Cloud Foundry.
- Built and maintained a dashboard for automation & analytics of Siebel CRM migration activities using React and NodeJS and deployed it to PCF.

## Academic Projects

### Distributed Store

**Technologies Used:** C++, Distributed Systems, Sharding, Load balancing, Multi-Threading, Concurrency

Built a distributed key-value store with a dynamic shard-master and a multi-threaded, concurrent and synchronized architecture.

### Photo-Realistic Super Resolution

**Technologies Used:** Deep Learning, Python, TensorFlow, Keras, GAN, NumPy, SRMAP

Surpassed the performance of traditional deterministic super-resolution methods by proposing a novel Super Resolution MAP generative method.

### Loglizer (Log Anomaly Detection Framework)

**Technologies Used:** Deep Learning, Python, TensorFlow, Keras, CNN, LSTM, NLP, NumPy

Used a CNN and LSTM based model to build an NLP based framework to detect anomalies in logs generated by large scale distributed systems.

### Stock Price Predictor

**Technologies Used:** Deep Learning, Python, TensorFlow, Keras, LSTM, TensorBoard, NumPy

Built an LSTM based model using TensorFlow and Keras to predict the stock prices and used TensorBoard to visualize the results.