

Dhruv Belai

Boston | MA | (857) 763-9077

belai.d@northeastern.edu | linkedin.com/in/dhruv-belai | github.com/deeybeey | deeybeey.vercel.app

EDUCATION

Northeastern University, Boston, MA

September 2023 – December 2025

Master of Science in Computer Science

Relevant Coursework: Scalable Distributed Systems, Algorithms, Database Management Systems, Web Development

Universal College of Engineering, Mumbai, India

August 2020 – June 2023

Bachelor of Engineering in Computer Engineering

Relevant Coursework: Data Structures, Big Data Analytics, Software Engineering, Cloud Computing, Operating Systems

SKILLS

Languages: Python, Java, R, HTML, CSS, JavaScript

Databases: MySQL, PostgreSQL, SQLite, MongoDB, DynamoDB

Applications: Git, GitHub, Docker, Excel, PowerBI, Tableau, VMWare, Jupyter, VS Code, IntelliJ

Frameworks: Pandas, NumPy, Matplotlib, Seaborn, Keras, Scikit-learn, Transformers, PyTorch, Express, React, Node.js

WORK EXPERIENCE

Software Engineer Intern

May 2019 – June 2019

Nibodh Educare, Mumbai, India

- Leveraged HTML, CSS, and JavaScript (MongoDB, Express, React, Node.js) to develop a **web application** portal, integrating **front-end** and **back-end** components into the **live code** of the website, implementing **OOD/OOP** principles.
- Implemented **AWS cloud** and **microservices** architecture to optimize data retrieval speeds and develop **REST APIs**, resulting in a 30% increase in system responsiveness, enhancing **data analytics** for informed decision-making.
- Championed **agile development** methodologies and employed **Git** for version control, ensuring efficient collaboration and **project management**, including **testing** using Cypress and Jest, alongside **code maintenance**.
- Facilitated **open communication** between stakeholders and the development team, ensuring **smooth deployment** while managing expectations and garnering **positive user feedback** through collaborative **problem-solving**.

PROJECTS

Distributed Key-Value Store

June 2024 – August 2024

- Developed a distributed key-value store in Java using TCP, UDP, and RPC (RMI) protocols, **designing architectures** for each algorithm to support get, put, and delete operations, ensuring seamless data **retrieval** and **storage**.
- Engineered 2-Phase Commit (2PC) for distributed **transactions**, ensuring **fault tolerance** and consistency across nodes.
- Deployed PAXOS consensus algorithm to ensure high **availability**, data **consistency**, and optimize distributed systems.

Project Roofs

October 2023 – December 2023

- Executed **SQL CRUD** operations through optimized **stored procedures**, significantly improving data consistency.
- Employed Pandas for streamlined **data analysis** and Matplotlib for better decision making through **data visualizations**.
- Followed **clean coding** practices, enabling seamless extension of the application's functionalities and **maintainability**.

CryptoCast

November 2022 – April 2023

- Modeled **deep learning** with TensorFlow using **LSTM** algorithm for accurate **time series** forecasting of cryptocurrency.
- Accomplished high accuracy through rigorous **model training** and analysis, providing valuable **market insights**.
- Crafted **user-friendly** GUI with PyQt, enabling seamless access to **dynamic visualizations** powered by Matplotlib.

CERTIFICATIONS

- AWS Academy Cloud Architecting November 2024
- AWS Academy Cloud Foundations October 2024
- FreeCodeCamp Machine Learning with Python (TensorFlow) June 2023
- AWS Academy Data Engineering January 2023
- IBM Machine Learning with Python (Scikit-learn) August 2022