

# Abhivarma Birru

Seattle, WA | 9408433513 | [abhivarma.birru@gmail.com](mailto:abhivarma.birru@gmail.com) | [linkedin.com/in/abhivarma-birru](https://www.linkedin.com/in/abhivarma-birru) | [github.com/ABV14](https://github.com/ABV14)

## PROFESSIONAL SUMMARY

Software Engineer with 3+ years of experience in developing end-to-end scalable web applications. Skilled in React and Java technologies. Proficient in full-stack development, software design patterns and system design.

## WORK EXPERIENCE

### Software Engineer

July 2024-Present

#### Neo4j - Quadrant Technologies

Redmond, WA

- Developed a data analytics platform using React and Java for handling data analytics and data engineering operations.
- Improved API response times of client requests by 15% using Java and designing GraphQL APIs for efficient data fetching.
- Designed fault-tolerant ETL pipelines for handling data ingestion of 1M+ data records into graph databases(Neo4j) from relational databases(PostgreSQL), leveraging multithreaded and concurrent operations in Java.
- Increased application availability through failover and load-balanced deployments using Azure cloud services, maintaining 100% uptime.

### Software Developer

October 2022 - May 2024

#### University of North Texas

Denton, Texas

- Developed UNT dining services website using React, TypeScript, Python and AWS DynamoDB handling over 10,000 daily transactions.
- Integrated Stripe API payment gateway, processing \$50K+ monthly transactions with comprehensive security protocols.
- Designed 80+ sales visualizations per semester with D3.js and tableau, generating valuable data-driven insights for designing optimal meal plans.

### Software Engineer

December 2020 - July 2022

#### Cognizant

Remote

- Developed frontend interfaces using React, Next.js and TypeScript for 10+ BUs, resulting in a 35% increase in the user experience of handling FMCG operations for business product development.
- Designed RESTful services using Java and Spring boot with adherence to SOLID principles, increasing application reliability and performance by 20% and reducing production issues by 15%.
- Achieved 25% higher transaction speeds for relational databases(AWS RDS) using query tuning and caching strategies.
- Collaborated with global teams in an Agile software development environment, delivering 20+ reliable and fault-tolerant features in the first 6 months.

## OTHER EXPERIENCE

### Graduate Researcher

Jan 2023 - December 2023

#### University of North Texas

Denton, Texas

- Developed an AI system using deep learning models and autoencoders in Python to modify complex large-column datasets into embeddings, significantly enhancing prediction accuracy of socioeconomic indicators.
- Designed an embeddings framework for geographic identifiers, increasing prediction accuracies for various data-driven applications.

### Full Stack Developer

September 2019 - November 2020

#### Upwork

Remote, India

- Built an cross-platform application using Next.js for handling housing management operations, improving operational efficiency by 30% across 200 housing communities.
- Improved request handling speeds by 25% by creating efficient backend services using Python, GraphQL, and MongoDB.

### Application Developer

August 2018 - September 2019

#### Upwork

Remote, India

- Developed a geo-navigation app using React, Python, and PostgreSQL, enhancing navigation capabilities through OSM APIs.
- Accomplished 95% map navigation accuracy using Kafka for performing real-time streaming of map data to the UI.

## EDUCATION

### University of North Texas

Denton, TX

Master of Science in Data Science - 3.9/4.0

Coursework: Data Science, Machine Learning, Software Development for AI, Natural Language processing, DBMS, Data Modeling

## TECHNICAL SKILLS

**Programming:** Java, JavaScript, TypeScript, Python, React, Spring Boot, Next.js, Django, Flask, FastAPI

**Databases:** MongoDB(NoSQL), Microsoft SQL server, Azure PostgreSQL, Neo4j, AWS DynamoDB

**Tools and Software:** Azure, AWS, Docker, Kubernetes, GitHub, GIT, Jenkins, ArgoCD

**Functional Skills:** Data Structures, Algorithms, Database Management, Operating Systems(Linux, MacOS), System Design