

# Hitesh Yarlagadda

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## EXPERIENCE

### CodeFacts IT Solutions

Hyderabad, India

Software Engineer

January 2023 – December 2023

- Engineered a scalable full-stack web application using React.js and Node.js, reducing load times by 30% and improving user experience.
- Designed and deployed RESTful APIs with Node.js and Express.js, improving data retrieval efficiency by 25%.
- Optimized (MongoDB) performance by redesigning schemas and creating indexes with Mongoose, enabling the system to process large-scale data entries and reducing average query time by 40%.
- Collaborated in an Agile team environment, participating in sprint planning, code reviews, and daily stand-ups to ensure timely delivery of features.
- Implemented CI/CD pipelines using GitHub Actions to automate builds, testing, and deployments, reducing manual deployment effort by 50%.

## PROJECTS

### Research Paper Summarization using Knowledge Graphs:

- Developed a research paper summarization system leveraging Knowledge Graphs to extract key entities and relationships, enabling structured and concise representation of scientific literature.
- Implemented NLP pipelines for text preprocessing, entity recognition, and graph-based summarization, improving readability and information retrieval efficiency for academic papers.

### Twitter Topic Modeling via LDA:

- Developed a topic modeling system with Latent Dirichlet Allocation (LDA) to analyze 50,000+ tweets, extracting sentiment trends and emerging topics for real-time social media insights.
- Designed interactive data visualizations (word clouds, topic distributions) using Python and Flask, enabling end-users to explore and interpret trending discussions effectively.

### Similar Document Search Application:

- Crafted a React and Flask web app for similar document search using AWS S3 and FAISS for optimized indexing and search relevance.
- Containerized and launched the application on AWS ECS with Docker for seamless scalability and management.

### Spotify Analytics Application:

- Designed and constructed a web application utilizing Spotify APIs for personalized analytics and recommendations, hosted frontend on AWS Amplify and backend on EC2, with CI/CD via GitHub Actions, metrics monitoring using Prometheus, Grafana and backend processes decoupled using Amazon SQS.

### Prediction of Mobile Prices:

- Built predictive models (KNN, Random Forest, Logistic Regression, Naive Bayes, Decision Tree) to classify mobile phone prices with more than 90% accuracy.
- Achieved 93.5% accuracy with KNN, outperforming other ML classifiers through hyperparameter tuning and evaluation with precision, recall, and F1-score.

## EDUCATION

### Northeastern University

Massachusetts, USA

Master of Science in Computer Science, GPA - 3.76

Expected Dec 2025

### Vellore Institute of Technology Amaravathi

Andhra Pradesh, India

Bachelor of Technology in Computer Science and Engineering, GPA - 8.46/10

May 2023

## SKILLS & CERTIFICATIONS

**Programming:** SQL, Python, Java, Swift, Flask, C++, Pandas, HTML/CSS, JavaScript, React.js, Express.js, Node.js

**Databases:** MySQL, PostgreSQL, Microsoft SQL Server, Redis, NoSQL (MongoDB)

**Tools:** PowerBI, Git, Tableau, MS Excel, Jupyter Notebook, IntelliJ, XCode, Docker, Kubernetes

**Cloud:** AWS (Lambda, EC2, EMR, Glue, S3), GCP (DataProc, Composer, BigQuery)

**Certifications:** [AWS Certified Cloud Practitioner](#), [Google Cloud Skills](#)