Naga Jahnavi Kommareddy

Raleigh,NC 27606 | nkommar@ncsu.edu | 919-559-8556 | linkedin.com/in/naga-jahnavi | github.com/NagaJahnavi

EDUCATION

North Carolina State University, **Raleigh, NC** August 2023 – December 2024
Masters Degree, Computer Science **CGPA: 4.0/4.0**
Coursework: Design and Analysis of Algorithms, Neural Networks, Automated Learning and Data Analysis, Database Systems, Cloud Computing

CVR College Of Engineering , Hyderabad, India August 2017 – July 2021
Bachelor of Technology, Computer Science and Engineering **CGPA: 9.89/10.0**
Coursework: Fundamentals of Data Science, Data Warehousing and Data Mining, Big Data Analytics, Predictive Analytics.

SKILLS

Programming Languages: C, Java, Python, R, Javascript.
Databases/ Operating Systems: MySQL, NoSQL, MongoDB, MariaDB, Oracle, Linux, Windows.
Data Visualization/ Big Data tools: PowerBI, Tableau, Hadoop, Apache Spark.
Libraries/ Frameworks: PyTorch, Tensorflow, Keras, Numpy, Pandas, Scikit-learn, MatplotLib.
Cloud : AWS, DynamoDB, S3, EC2, Lambda, Cloud watch, SQS, SNS, Redshift, GCP, Azure, Docker, Kubernetes.
Web Development: HTML, CSS, Javascript, Typescript, React JS, Node JS, XML, JSON.
Tools: Git , GitHub, Jupyter Notebook, Anaconda, Intellij Idea, Visual Studio Code, Eclipse, MS Excel, Postman, Jenkins, JIRA, CI/CD, Agile, Scrum.

WORK EXPERIENCE

- **Software Development Engineer**, **Amazon** August 2021 – August 2023
  - Implemented efficient, unit-tested code in Java and Spring Boot utilizing **JUnit, Mockito, and EasyMock frameworks**, achieving **90% code coverage**. Involved in the full Software Development Lifecycle by conducting end-to-end functional testing and managed deployments.
  - Developed a game-changing Aztec barcode feature, including frontend development in **HTML, CSS, Javascript, React.js,** and backend **API** development in **Java, Spring Framework** resolving legacy issues and **unblocking 5 carrier migrations with a 20% boost in business.**
  - Updated Standard Operating Procedures for process improvement and developed master test cases, resulting in a 50% reduction in production failures.
  - Implemented a **Python script** for fetching the manifest IDs from **DynamoDB** , **reducing 20% manual effort.**
  - Integrated external logistics providers with Amazon's systems by converting business requirements to functional designs and furnished a platform for sellers to ship their products, serving 35% of traffic.
- **Software Development Engineer Intern , Amazon** January 2021 – July 2021
  - Leveraged exceptional project management and problem solving skills to pioneer the team's inaugural label migration project, executing a rapid migration, and slashing the project timeline by 30% through concurrent phase work.
  - Debugged and troubleshooted application-level issues utilizing **Linux commands and shell scripting** to analyze application logs and **reduced ticket count by 80%**.

PROJECTS

- **Database Design and Management | Wolf Parking Management System**
  Developed ER diagrams and database table schemas for Wolf Parking Management System used by university employees, students, and visitors to manage permits, citations, parking lots, spaces, and zones. Wrote comprehensive SQL queries, constraints, and triggers for all use cases using Java, JDBC, and MariaDB. Tech Stack: **SQL, Java, JDBC, MariaDB**
- **Machine Learning | Bankruptcy Prediction**
  Built a machine learning model for bankruptcy prediction using the Taiwanese Economic Journal dataset. Performed Exploratory Data Analysis, Data Preprocessing, Feature Selection, and SMOTE to address class imbalance. Conducted hyperparameter tuning on Random Forest, XGBoost, and SVM classifiers, resulting in a robust F1 score of 0.98 for accurate predictions.
  Tech Stack: **Jupyter Notebook , Python (NumPy, Pandas, MatplotLib, SciKit learn).**
- **Machine Learning | Bankruptcy Prediction**
  Performed exploratory data analysis and applied advanced preprocessing techniques to optimize the Australian weather dataset for classification using supervised machine learning. Achieved an impressive 85% accuracy rate in target feature prediction utilizing Random Forest Classifier and Logistic Regression algorithms.
  Tech Stack: **Jupyter Notebook, Python (NumPy, Pandas, MatplotLib, SciKit learn).**
- **Deep Learning | Human Activity Recognition**
  Built a Convolutional Neural Network (CNN) to classify accelerometer and gyrometer signal data into human activities: sitting, standing, lying, walking upstairs, and walking downstairs. Achieved a 94% F1 score, demonstrating effective pattern recognition and classification capabilities. Tech Stack: **Jupyter Notebook, Python, PyTorch, Keras, Tensorflow**

CERTIFICATIONS

- **Programming in Java,** by Indian Institute of Technology offered through NPTEL.
- **Programming, Data Structures and Algorithms using Python**, by Indian Institute of Technology offered through NPTEL
- **Full Stack Web Development Mastery Course (MERN stack)**, offered by Udemy
- **Service Oriented Architecture**, by University of Alabama offered through Coursera.