Kartheek Reddy Bandi

Jersey City, NJ, 07304

[Email](mailto:kbandi1@stevens.edu) | Phone | [LinkedIn](https://www.linkedin.com/in/kartheek-reddy-bandi-9a0572170/) | [GitHub](https://github.com/Kartheekbandi)

# SKILLS

|  |  |
| --- | --- |
| **Programming Languages:** | C, C++, Java, and Python |
| **Databases:** | SQL (MySQL, Oracle, and Postgres) and NoSQL (MongoDB and Firebase) |
| **Frameworks:** | React.js, Angular, Node.js, Flask, Spring Boot, Laravel, Flutter, NumPy, scikit-learn,  pandas,Django |
| **Software’s:** | MS Office Suite, Git, Docker, Kubernetes, and Jenkins |
| **Other Skills:** | Agile methodologies (Scrum), UI/UX design, AWS, and Blockchain |

**EXPERIENCE**

**Software Development Intern** *May 2021 – Sep 2021*

***Neo mentors Education***, Hyderabad, India

* Worked on a web application using React for front-end development and NodeJS for back-end development.
* Integrated React concepts including life cycle methods, hooks, and object-oriented programing concepts like abstraction and inheritance to build and developed a portal with a separate interface for students and teachers.
* Stored students marks in the backend and generated performance analytic reports based on the data.
* Used Scrum and Agile processes to develop sophisticated, well-structured solutions.

**Full Stack Web Development Intern** *May 2020 –Dec 2020*

***Sagar soft Pvt Ltd***, Hyderabad, India

* Worked on a comprehensive, user-friendly web application for diagnostic test orders, streamlining the process and reducing paperwork by approximately 75%.
* Collaborated closely with a project mentor to test and integrate new design features, ensuring adherence to web security best practices.
* Successfully troubleshooted and debugged code to ensure compatibility across various devices and browsers.
* Ensured high-quality software by conducting thorough manual testing on the web application, identifying, and resolving any issues or bugs.
* Wrote and executed Postman tests to validate system accuracy, including Okta authentication, user information retrieval, service integrations, and functionality after modifications.
* Worked collaboratively with a cross-functional team consisting of developers, product managers, and QA engineers to design and implement new features, resolve bugs, and enhance the overall user experience.

# PROJECTS

[**Hotel Booking Prediction**](https://github.com/Kartheekbandi/Hotel_Booking_Predictions) | Machine Learning, Supervised Learning, Prediction Algorithms *Feb 2023 - July 2023*

* Implemented Machine Learning algorithms to predict customer bookings on Airbnb using the Hotel Booking Demand dataset. Conducted comprehensive data preprocessing and feature engineering.
* Explored and compared 4 different machine learning models, including Logistic Regression, Decision Tree, Naive Bayes Classifier, and k-Nearest Neighbors, to identify the best-performing model for predicting customer bookings.
* Demonstrated the effectiveness of the Decision Tree classifier, which achieved the highest accuracy of 0.840 and ROC AUC score of 0.846, followed by the Logistic Regression model, Naive Bayes, and K Nearest Neighbors.

[**E-Commerce Application**](https://github.com/Kartheekbandi/E-Commerce_Application) | Amazon Web Services (AWS), Full-Stack Development, DevOps, Git *Nov 2022 – Feb 2023*

* Developed and deployed an e-commerce application with a frontend built using Next.js and a backend using Nest.js. Utilized MongoDB as the database management system. Automated testing using Jest framework.
* Designed a resilient and fault-tolerant microservice architecture. Decoupled the backend and frontend modules that run on multiple docker containers flawlessly and integrated them.
* Made use of DevOps tools to automate most of the Software Development Life Cycle (SDLC) phases. The proposed architecture is dependable, with absolutely 0 seconds of downtime, and easily scalable.

[**Intrusion Detection System**](https://github.com/Kartheekbandi/Intrusion-Detection) | Python, Classification Techniques *Mar 2022 – May 2022*

* Applied SMOTE technique to oversample the under sampled data in the imbalanced dataset whose 7% data points are intrusion detected whilst remaining 93% are legitimate requests.
* Applied various classification algorithms on the KDD Cup dataset to build a predictive model. The random forest classifier attained an accuracy of 89.9%.

[**Covid Cases Predictor**](https://github.com/Kartheekbandi/Covid_Cases_Estimator) | Python, Flask, Linear Regression Technique *Feb 2020 – May 2020*

* Trained a machine learning model that predicts the prevalent number of covid cases by incorporating regression method, with an accuracy of 68%.
* Created a user interface where the users can fill in the location and date and get the predicted number of cases by sending the request to the REST API.

[**Knowledge Booster**](https://github.com/Kartheekbandi/Knowledge-Bosster) | Django, PostgreSQL, html ,CSS *Nov 2019 – Feb 2020*

* Knowledge Booster is a Django-based web application designed to enhance children's knowledge and skills through quizzes and educational resources. Users can register and log in to access the application's features, which include subject-specific quizzes in Mental Ability, English, and General Knowledge.
* The quizzes consist of questions randomly selected from a database, categorized into easy, medium, and difficult levels. Users can also explore educational resources between quizzes and track their scores through visualizations.

[**Bank Customer Prediction**](https://github.com/Kartheekbandi/Bank_Customer_Prediction/tree/main) | Python, Pandas, NumPy *Sep 2019 – Oct 2019*

* Developed a machine learning model to predict customer churn for a top European bank, achieving up to 86.36% accuracy.
* Analyzed customer data and identified patterns causing churn, enabling proactive measures to retain customers and improve customer relationship management.
* Implemented decision tree algorithms and performed data preprocessing, feature engineering, and model evaluation to drive actionable insights for the bank.

# EDUCATION

**Stevens Institute of Technology**, Hoboken, NJ *Sep 2022 - Dec 2023 Master of Science, Software Engineering*

**Rajiv Gandhi Institute of Petroleum Technology**, Jais, India *Jul 2018 - Jun 2022 Bachelor of Engineering, Petroleum Engineering*