

## Sai Praveen Kudapa

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### EDUCATION

#### Master of Science in Computer Science

December 2023

Stevens Institute of Technology, Hoboken, New Jersey, USA

#### Bachelor of Technology in Computer Science and Engineering

May 2020

Amrita Vishwa Vidyapeetham, Bangalore, Karnataka, India

### TECHNICAL SKILLS

- **Languages:** Core Java | Python | C | C# | SQL | HTML | CSS | JavaScript | YAML | AngularJS | Bootstrap | ReactJS
- **Tools:** GitHub | Jenkins | Visual Studio | VS code | SAP Crystal Reports | Docker | MongoDB | MySQL
- **Platforms & Technologies:** Ubuntu | Google Cloud Platform | AWS | ASP.Net | Tableau | PowerBI
- **Operating System:** Windows | Linux | MacOS | Android
- **Certifications:** Google Certified Data Analytics from Coursera | Data Structures and Algorithms from LinkedIn

### PROFESSIONAL EXPERIENCE

#### Software Developer | SS IT SOLUTIONS, Hyderabad, Telangana, India

July 2020 – July 2022

- Developed a customized **ERP model**, implementing **Scrum** and **Agile** techniques to create a development process.
- Ensured a consistent and visually appealing user experience by utilizing Bootstrap, CSS, and **ReactJS**.
- Integrated **RESTful APIs** for system integration, significantly improving inter-service communication and data exchange.
- Analyzed **NuGet package dependencies** and integrated them into the **ASP.NET Core** application for **Microservices**, optimizing ERP functionalities.
- Participated in collaborative efforts, conducted regular code reviews, and managed the source repository using **Git**.
- Established APIs using **ASP.NET Web API**, enabling efficient queries and integration with the ERP system.
- Designed and implemented an **Inventory Management** module focusing on stock tracking, orders, and warehouse management.
- Created secure EDI and APIs with **WCF**, maintaining data protection measures to ensure smooth, authorized data exchange.
- Developed a **Sales module**, incorporating features for lead tracking, customer communication, and sales reporting.
- Contributed to designing and developing a distributed computing environment to optimize the ERP system's scalability and performance.
- Designed user interfaces with a focus on functionality and security, leveraging knowledge in **ASP.NET MVC** and **C#**.
- Conducted unit testing using **MSTest** and the **Moq framework** to ensure the reliability and stability of ERP modules.
- Implemented database structures for storing customer information, sales orders, and transaction history.
- Enhanced **MS SQL Server** with triggers, joins, and procedures, improving data manipulation, resulting in a 50% increase in processing speed and a 30% improvement in data correctness.
- Maintained records using **Crystal Reports** and created customized reports for various purposes.
- Contributed to the Reporting module, utilizing **SQL Server Reporting Services (SSRS)** for report generation.
- Used the **Entity Framework** for seamless mapping of entity objects to relational databases, enhancing data consistency.

### PROJECTS

#### Disease Detection Through Advanced Audio Analysis | Stevens Institute of Technology

July 2023 – October 2023

- Preprocessed respiratory sound data and extracted Mel-Frequency Cepstral Coefficients using advanced audio analysis libraries.
- Developed a deep learning classification model, achieving an 89% accuracy rate in distinguishing between types of respiratory sounds.
- Evaluated the model's performance, including loss and accuracy visualization and confusion matrix analysis.
- Utilized **NumPy**, **Pandas**, **PyTorch**, **TensorFlow**, **Keras**, and **Scikit-learn** for data handling, model building, and evaluation.

#### E-Wallet Project | Stevens Institute of Technology

January 2023 - July 2023

- Led the development of a secure e-wallet application, employing Jenkins for continuous integration and **AWS** with **Kubernetes** for scalable cloud hosting.
- Containerized the application using **Docker** for isolated and consistent deployment environments.
- Focused on Java backend services for financial transactions, ensuring robustness and high availability.
- Introduced an iOS module with a seamless and intuitive user interface for mobile devices.
- Managed source code using **Git** and utilized **Amazon ECR** for secure Docker container image storage.

#### Housing Price Prediction | Stevens Institute of Technology

January 2022 – July 2022

- Developed a predictive model for housing prices with a 92% accuracy rate.
- Used **Pandas** for data manipulation and **Scikit-learn** for gradient-boosting regression model implementation.
- Performed data analysis and feature engineering using **Python**, reducing the Mean Squared Error by 20%.