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
- **Tools:** GitHub | Jenkins | SAP Crystal Reports | MySQL | Terraform
- **Web Development Tools:** ASP.Net | WordPress | Apache
- **Cloud Platforms:** AWS
- **Certifications:** AWS Certified Developer – Associate | Google Certified Data Analytics from Coursera

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.
- Integrated **RESTful APIs** for system integration, significantly improving inter-service communication and data exchange.
- 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.
- 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

E-Wallet | Stevens Institute of Technology January 2023 - December 2023

- Developed a secured e-wallet application, enhancing customer transaction capabilities with high-level security features.
- Implemented **Jenkins** for robust continuous integration, streamlining the deployment pipeline for efficient release management.
- Utilized **AWS** cloud services, integrating **Kubernetes** for scalable hosting and **RDS** for reliable, scalable database management.
- Managed source code versioning with **Git**, facilitating team collaboration and codebase stability.
- Configured **Amazon ECR** for secure storage and management of **Docker** container images, enforcing stringent security protocols.
- Deployed **Apache** Web Server as the backbone for hosting, optimizing delivery of dynamic web content.
- Integrated **WordPress** to provide a user-friendly content management system, enabling seamless marketing and customer outreach.

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.

Housing Price Prediction | Stevens Institute of Technology January 2022 - May 2023

- Introduced a model utilizing data-driven approach, leveraging **Scikit-learn** and **Pandas** libraries to forecast California's median home values, showcasing technical expertise in feature engineering, data preparation, and model selection.
- Conducted exploratory data analysis using **Python** programming and data analytical techniques on complex data sets to gain valuable insights and enhance feature engineering process.
- Programmed **gradient boosting regression** technique to optimize performance of model, enabling valuable recommendations.