RAJAT KUMAR PARIDA

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**SUMMARY**

Software Engineer with 4+ years’ experience delivering AI-powered, cloud-native web and mobile platforms. Skilled in full-stack development (React, Angular, .NET Core, FastAPI) and AI/ML integration (predictive analytics, LSTM forecasting, generative AI chatbots, LangChain). Adept at deploying applications on AWS and Azure with CI/CD pipelines, ensuring scalability, reliability, and business impact. Recognized for combining deep technical expertise with practical AI application, enabling organizations to make data-driven decisions and enhance user experience.

**PROFESSIONAL EXPERIENCE** 

**Graduate Teaching Assistant - Swipe-In Student App**

*Midwestern State University, Wichita Falls, TX Jan 2025 – May 2025*

* Architected and deployed an AI-driven dining management platform serving thousands of students, integrating predictive modeling, generative AI, and full-stack development to optimize operations and enhance user experience.
* Built asynchronous REST APIs with FastAPI to connect ML models and databases with the React Native frontend, ensuring low-latency predictions, real-time swipe tracking, and Flex Dollar transaction consistency.
* Developed an LSTM-based forecasting engine (TensorFlow/Keras, 96% accuracy) with stacked recurrent layers, dropout, and Adam optimizer, powering time-series demand prediction and data-driven resource planning.
* Integrated a Generative AI chatbot (OpenAI API, LangChain) into the mobile app interface, automating student dining queries (menus, balances, peak times), reducing manual support load by 40%, and improving student adoption.
* Designed and implemented responsive front-end interfaces in React Native, delivering modular UI components, intuitive user flows, and seamless integration of predictive insights and AI-driven recommendations.
* Built a recommendation system using generative AI and prompt engineering, generating personalized meal suggestions aligned with dietary preferences, calorie targets, and behavioral patterns.
* Automated natural language report generation with LLM-based summarization pipelines, embedding insights directly into the admin dashboard for real-time business intelligence.
* Deployed and scaled the application on AWS Cloud (EC2, RDS, S3, Ubuntu Linux), ensuring high availability, cost optimization, and secure ML model hosting in production.
* Streamlined MLOps and CI/CD workflows using GitHub Actions, Ubuntu Linux, and Postman, enabling continuous integration, automated testing, and reliable AI service delivery.
* Championed AI/ML best practices in Agile sprints, while also leading code reviews, frontend-backend integration efforts, and mentorship on deploying AI-powered full-stack applications.

**Graduate Teaching Assistant - Heart Attack Prediction Project**

*Midwestern State University, Wichita Falls, TX Aug 2024 – Dec 2024*

* Developed a predictive health analytics pipeline using logistic regression and deep neural networks (TensorFlow/Keras) to detect heart attack risk, achieving 94% accuracy on 10,000+ patient records.
* Designed and trained a neural network architecture (128-64 hidden layers, ReLU activation, dropout regularization, L2 penalty, Adam optimizer, early stopping, learning-rate scheduling) to improve generalization and reduce overfitting.
* Conducted extensive data preprocessing and feature engineering, including label encoding, standardization, and class balancing, to optimize model performance.
* Applied rigorous model evaluation techniques (confusion matrix, ROC-AUC, classification report) to ensure reliability in risk stratification.
* Improved predictive precision by 22% through hyperparameter tuning and EDA-driven feature selection, demonstrating applied ML optimization skills.
* Translated predictive outputs into actionable healthcare insights, supporting student wellness programs with early detection indicators for at-risk individuals.
* Led stakeholder demos, explained model interpretability, and integrated feedback to align the predictive model with healthcare program needs.

**Software Engineer**

*Cognizant, India Aug 2021 – Jul 2023*

* Managed full SDLC of multiple client-facing .NET applications, improving backend performance, scalability, and code quality through systematic refactoring and peer review.
* Triaged and resolved 100+ ServiceNow incidents per week (P1–P4), reducing P3–P4 resolution times by 40% and significantly improving operational SLAs.
* Diagnosed production issues via Splunk log analysis, Auth0 authentication services, and SQL Server queries, accelerating turnaround on high-priority tickets.
* Automated and expanded NUnit unit testing coverage, preventing 98% of defects prior to release and strengthening QA reliability.
* Collaborated with DevOps teams to design deployment scripts and monitoring solutions on Azure Cloud (Docker, CI/CD), ensuring 24/7 production reliability.
* Documented processes and solutions using Jira and Confluence, ensuring knowledge continuity and smooth handovers across global teams.

**Programmer Analyst**

*Cognizant, India Feb 2021 – Jul 2021*

* Developed Library Records Management (LRM) web application using ASP.NET Web API, Angular, and SQL Server, enabling CRUD operations and role-based access control.
* Automated late-fee calculations and streamlined workflows, accelerating sprint deliveries by 40% and improving development efficiency.
* Achieved 95% NUnit unit test coverage, reducing post-deployment defects by 40% and significantly improving release quality
* Optimized Angular UI performance, reducing page load times by 25% and enhancing user experience.
* Built and deployed RESTful microservices in .NET MVC on Azure, maintaining 99.9% uptime through proactive Splunk monitoring and performance tuning.
* Applied Agile methodology across the project lifecycle, collaborating with cross-functional teams to deliver features on time and within scope.

**TECHNICAL SKILLS**

* **Programming Languages:** Python, C#, JavaScript, TypeScript, SQL
* **Frameworks & Libraries: .**NET Core, FastAPI, Angular, React Native, Node.js, Entity Framework, WebAPI
* **AI/ML Technologies:** TensorFlow, Keras, Scikit-learn, LSTM, CNN, DNN, Predictive Analytics, Generative AI (LLMs, LangChain, OpenAI API)
* **Cloud & DevOps:** AWS (EC2, RDS, S3), Azure, DigitalOcean, Ubuntu Linux, Docker, Git, CI/CD (GitHub Actions, Azure DevOps), Microservices, MLOps
* **Testing & Automation**: NUnit, Postman, Unit Testing, Integration Testing, API Validation
* **Monitoring & Tools:** Splunk, ServiceNow, Auth0, Jira, Confluence, Visual Studio, Tableau, Power BI
* **Development Practices:** Agile/Scrum, OOP, Data Structures & Algorithms, RESTful APIs, GraphQL, System Design

**EDUCATION**

**Master of Science, Computer Science**

*Midwestern State University, Wichita Falls, TX Aug 2023 – May 2025*

* **GPA:** 3.82/4.0
* **Coursework:** Advanced Software Engineering, Algorithm Analysis, Data Science, Artificial Intelligence, Computer and Network Security, Mobile App Development, Human Computer Interaction, Unix/Linux, Advanced Operating Systems

**Bachelor of Technology, Computer Science Engineering**

*Bachelor of Technology, Electronics and Communication Engineering Jul 2017 – Aug 2021*

* **GPA:** 8.5/10
* **Coursework:** Algorithms and Data Structures, Databases, Computer Architecture