RAJAT KUMAR PARIDA

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**SUMMARY**

Software Engineer with 4+ years of experience designing and deploying secure cloud-based, AI-driven applications. Skilled in image processing, transformer-based models, cross-platform mobile development, and full-stack cloud architectures. Adept at delivering real-time inference pipelines, optimizing system performance, and collaborating across product, UI/UX, and engineering teams in Agile environments. AWS Certified Developer with strong expertise in AI/ML, computer vision, and predictive analytics.

**PROFESSIONAL EXPERIENCE**

**Midwestern State University Jan 2025 - May 2025**

*Graduate Teaching Assistant - Web Developer Wichita Falls, TX*

* Architected and deployed a Swipe-in dining management platform for thousands of students, integrating predictive modeling, generative AI and full-stack development to optimize operations, which enhanced user satisfaction and streamlined processes
* 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.
* Promoted AI/ML best practices in Agile sprints, led code reviews, frontend-backend integration efforts, and mentored team members on deploying AI-powered full-stack applications, which improved team collaboration and project quality

**Midwestern State University Aug 2024 - Dec 2024**

*Graduate Teaching Assistant - Web Developer Wichita Falls, TX*

* Developed a predictive health analytics pipeline using logistic regression and deep neural networks (TensorFlow/Keras) to identify heart attack risk, achieving 94% accuracy on over 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.

**Cognizant Technology Solutions Aug 2021 - Jul 2023**

*Software Engineer India*

* Managed the full SDLC of a client-facing .NET website, enhancing backend performance, scalability, and code quality through systematic refactoring, peer reviews, and proactive issue resolution.
* Triaged and resolved 100+ ServiceNow incidents, problems, and request items per week (P1-P4), following ITIL best practices to reduce P3-P4 resolution times by 40% and significantly improve 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 ITIL aligned support processes and solutions using Jira and Confluence, ensuring knowledge continuity and smooth handovers across global teams.

**Cognizant Technology Solutions Feb 2021 - Jul 2021**

*Programmer Analyst India*

* 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, Java
* **Frameworks & Libraries**: .NET Core, FastAPI, Angular, React Native, Node.js, Springboot, 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**

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

*Master of Science, Computer Science*

* **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

**Institute of Aeronautical Engineering Jul 2017 - Aug 2021**

*Bachelor of Technology, Computer Science Engineering, Electronics and Communication Engineering*

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