RAJAT KUMAR PARIDA

New York, NY 11420 | +1(940)-309-0096 | [rajatkumarparida0105@gmail.com](mailto:rajatkumarparida0105@gmail.com) | [LinkedIn](https://www.linkedin.com/in/rajatparida33/) | [Github](https://github.com/RajatProg/) | [Website](https://rajatportfolio.info)

**SUMMARY**

I’m a software engineer with over four years of experience building web and mobile platforms that use AI and distributed systems to solve real business problems. I enjoy designing solutions that are scalable, reliable, and mindful of costs, especially with cloud technologies like AWS and Azure. My background covers object-oriented programming (Python, Java, C#), cloud deployments, and bringing predictive analytics and AI into real products. I work best in agile teams, am comfortable with ambiguity, and always focus on creating value for users. I’m an AWS Certified Developer and AI Practitioner, and I’m passionate about using technology to make a difference.

**PROFESSIONAL EXPERIENCE**

**Midwestern State University Jan 2025 - May 2025***Graduate Teaching Assistant - Web Developer Wichita Falls, TX*

* Architected and deployed a scalable Swipe-in Dining Management platform for thousands of students, integrating predictive modeling, generative AI, and full-stack technologies to optimize operations and enhance user satisfaction.
* Designed asynchronous REST APIs with FastAPI to seamlessly connect ML models and databases with a React Native frontend, enabling low-latency predictions, real-time swipe tracking, and reliable transaction management.
* Developed an LSTM-based forecasting engine in TensorFlow/Keras (96% accuracy) for time-series demand prediction, enabling data-driven resource planning and operational efficiency.
* Integrated a generative AI chatbot (OpenAI API, LangChain) into the mobile app, automating student dining support (menus, balances, peak times) and reducing manual query load by 40%.
* Built a personalized meal recommendation engine using prompt engineering, aligning meal suggestions with dietary needs and behavioral data.
* Automated natural language report generation through an LLM-driven summarization pipeline, embedding actionable insights in the admin dashboard for real-time decision support.
* Deployed and scaled the application on AWS (EC2, RDS, S3, Ubuntu Linux), ensuring high availability, secure ML model hosting, and cost-efficient cloud operations.
* Streamlined MLOps and CI/CD using GitHub Actions, Postman, and automated testing on Ubuntu, supporting continuous delivery and robust AI service deployment.
* Promoted Agile and AI/ML best practices: led code reviews, frontend-backend integration, and mentored teammates to deliver cloud-native, AI-driven applications, enhancing team performance and project quality.

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

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

* Developed a predictive health analytics pipeline utilizing logistic regression and deep neural networks (TensorFlow/Keras), achieving 94% accuracy in heart attack risk detection on 10,000+ patient records.
* Designed and trained a robust neural network (128-64 hidden layers, ReLU, dropout, L2 regularization, Adam optimizer, early stopping, learning-rate scheduling) to maximize generalization and prevent overfitting.
* Applied advanced data preprocessing and feature engineering, including label encoding, normalization, and class balancing, to optimize model performance and reliability.
* Employed rigorous model evaluation techniques (confusion matrix, ROC-AUC, classification reports), ensuring consistent risk stratification and dependable predictions.
* Boosted predictive precision by 22% through hyperparameter tuning and EDA-driven feature selection, demonstrating strong applied ML and optimization skills.
* Operationalized predictive insights to support student wellness programs, facilitating early detection and intervention for high-risk individuals.
* Led stakeholder demos, communicated model interpretability, and integrated feedback to align the solution with evolving healthcare requirements.

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

*Software Engineer India*

* Managed the end-to-end SDLC for a client-facing .NET platform, systematically enhancing backend performance, scalability, and code quality through refactoring, peer code reviews, and proactive issue remediation.
* Triaged and resolved 100+ ServiceNow incidents weekly (P1–P4), reducing P3–P4 resolution times by 40% and achieving significant improvements in operational SLAs.
* Diagnosed and resolved production issues leveraging Splunk log analysis, Auth0 authentication, and SQL Server queries, ensuring rapid turnaround on high-priority support tickets.
* Automated and extended NUnit unit testing coverage, preventing 98% of release defects and strengthening overall QA reliability.
* Collaborated with DevOps on Azure Cloud deployments (Docker, CI/CD), architecting robust deployment scripts, monitoring solutions, and ensuring 24/7 production reliability.
* Documented technical solutions, workflows, and best practices using Jira and Confluence, enabling seamless handovers and knowledge sharing within cross-functional and globally distributed teams.

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

*Programmer Analyst India*

* Developed a Library Records Management (LRM) web application using ASP.NET Web API, Angular, and SQL Server, implementing secure CRUD operations with robust role-based access control.
* Automated late-fee processing and streamlined business workflows, accelerating sprint delivery cadence by 40% and driving team efficiency improvements.
* Achieved 95% NUnit unit test coverage, reducing post-deployment defects by 40% and enhancing overall release quality.
* Optimized Angular UI performance, lowering page load times by 25% and improving user experience across devices.
* Built and deployed RESTful microservices with .NET MVC on Azure, maintaining 99.9% application uptime via proactive Splunk monitoring and ongoing performance tuning.
* Leveraged Agile methodologies throughout the project lifecycle, collaborating with cross-functional teams to deliver high-priority features on schedule and within scope.

**CERTIFICATIONS**

* AWS Certified Developer - Associate
* AWS Certified AI Practitioner

**TECHNICAL SKILLS**

* **Programming:**Python, Java, C#, C++, JavaScript, TypeScript, SQL
* **Cloud & DevOps:**AWS (EC2, RDS, S3, Elastic Beanstalk, Lambda, IAM, CloudFront), Azure, Ubuntu Linux, Docker, Terraform, Git, CI/CD (GitHub Actions, Azure DevOps), Microservices, MLOps
* **Databases:**SQL Server, MySQL, PostgreSQL, DynamoDB, MongoDB, NoSQL
* **Frameworks & Libraries:**.NET Core, FastAPI, Angular, React Native, Node.js, Spring Boot, Entity Framework, Web API
* **AI/ML:**TensorFlow, Keras, Scikit-learn, LSTM, CNN, DNN, Generative AI(LLMs, LangChain, OpenAI API), Predictive Analytics
* **Testing & Automation:**NUnit Moq, Postman, Unit Testing, Integration Testing, API Validation
* **Monitoring & Tools:**ServiceNow, Splunk, Auth0, Jira, Confluence, Visual Studio, Figma
* **Engineering Practices:**Agile, 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