Shivani Polagouni

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Aspiring .NET Developer and Graduate Research Assistant with expertise in C#, .NET 7/8, Azure cloud services, and SQL. Skilled in backend development, RESTful APIs, and CI/CD automation, with a strong foundation in data analytics using Tableau. Passionate about developing scalable cloud-based solutions and optimizing application performance. Committed to building scalable solutions and using Agile methodologies to drive continuous improvement and deliver data-driven software solutions.

Skills

Programming Languages: C#, .NET 7/8, ASP.NET Core MVC & Web API, Entity Framework Core,Python, MySql,Angular.
Cloud & Devops: Azure App Services, Azure Functions, Azure SQL, GitHub Actions
Testing & Debugging: NUnit, Postman
Other Tools & Methodologies: Tools & Best Practices: Git, Azure Repos, CI/CD Pipelines, Agile/Scrum, RESTful APIs, Microservices,Visual Studio

Education Background

Central Michigan University **Aug 2023 – May 2025**
Master's in Information Systems *Mount Pleasant, Michigan*

Vignan's Institute of Management and Technology **Aug 2017 – May 2021**
Computer Science And Engineering *Hyderabad, India*

Professional Experience

Central Michigan University **Hyderabad, India**
Graduate Research Assistant *Jan 2023 - Dec 2023*

- Analyzed student performance data using **SQL** and **Power BI** , providing insights that helped refine course materials and improve student engagement by**15%**.
- Developed interactive dashboards using Tableau and Excel pivot tables to visualize student progress, enabling real-time decision-making for faculty and enhancing performance tracking for **50+** students.
- Orchestrated coursework management, grading automation, and instructional material development, improving course efficiency by **30%** .

Cognizant **Hyderabad, India**
Programmar Analyst – Alaska Airlines *Aug 2021 - Aug 2023*

- Engineered and maintained .NET-based applications, including Aircraft Configuration & Manufacturing and VisMaint, handling 50,000+ transactions per day to improve system scalability and performance.
- Architected and implemented scalable RESTful APIs and microservices, enabling seamless integration between backend and frontend applications, while deploying cloud-based solutions using Azure App Services, improving system performance, maintainability, and reducing downtime by **40%**
- Streamlined testing processes with NUnit, achieving **98%** test coverage for critical modules, and refined CI/CD pipelines, reducing deployment time by **80%** and accelerating release cycles by **60%** through automation and Azure DevOps integration.

Cognizant **Hyderabad, India**
Internship *Aug 2020 - Aug 2021*

- Diagnosed and resolved issues in **.NET applications**, collaborating with senior developers to improve system stability.
- Acquired hands-on expertise in C# and **.**NET Framework, actively contributing to real-time project development.
- Developed and implemented basic CRUD operations in C# and SQL Server, leveraging Entity Framework to streamline ORM-based database interactions for real-time applications.

Projects

Capstone Project: Smart Recipe Finder (Cook Mate) **Aug 2024-Dec 2024**

Central Michigan University *Michigan*

- Developed a desktop application using **Python (Tkinter for UI), MySQL** for backend database management, and Pillow for image processing, enabling ingredient-based recipe searches and customized meal recommendations.
- Ensured system efficiency by optimizing SQL queries, leveraging open-source technologies, and designing a cost-effective architecture with scalable revenue model.

Alaska Airlines **Jan 2022-July 2023**

Cognizant *Hyderabad*

- Collaborated with the backend development team for Alaska Airlines, working in the **Aircraft Configuration & Manufacturing** domain to develop and maintain .NET-based applications, handling high-volume transactions.
- Engineered backend solutions including scalable RESTful APIs and cloud-based applications using Azure App Services, improving system performance and reducing downtime by **40%**.
- Developed and optimized backend systems, ensuring seamless integration between frontend and backend platforms, directly impacting the efficiency of airline operation.

Machine Learning for Web Vulnerability Detection – CSRF **Aug 2020-Dec 2020**

Bachelors

- Developed and implemented ML models using **Python, Scikit-Learn, and TensorFlow**, leveraging algorithms like Random Forest, SVM, and Neural Networks to enhance the accuracy and efficiency of detecting Cross-Site Request Forgery (CSRF) vulnerabilities.
- Documented methodologies and presented findings to stakeholders, utilizing data preprocessing techniques, feature engineering, and model evaluation metrics, contributing to internal knowledge sharing and improving ML-based security detection systems.

Certifications

- Basic Python Programming – University of Michigan
- AI for Everyone – University of Michigan (Coursera)
- Python Certified – Internshala Training.
- Azure Microsoft AZ-900 Certification