Rylan L. Mattocks

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Recent Computer Science graduate with a mix of knowledge and hands-on skills developed through diverse software development projects and self-study. Effective communicator and collaborator with four years of professional experience in a team environment. Seeking challenging technology roles with innovative organizations.

EDUCATION & CERTIFICATIONS

BS, Computer Science, Western Governors University - Salt Lake City, UT

Coursework: Network and Security Foundations, Business of IT (project management), Intro to IT, Web
Development Applications, Scripting and Programming, Computer Architecture, Data Management, Software 1 & 2
(Java), Operating Systems, Information Security Fundamentals, Data Structures and Algorithms 1 & 2, Tech Comm,
Software QA, Intro to AI, Capstone Project

CompTIA Project+ Certified (2018) CIW Site Development Associate (2018) AXELOS ITIL Foundation (2021)

PROJECTS

Grading Application (<u>GitHub repo</u>)

- Developed a web application to help educational institutions manage classes, students, teachers, assignments, and grades.
- Engineered a secure backend using .NET Web API, C#, and Entity Framework Core, adhering to REST principles.
- Deployed the application on Microsoft Azure, ensuring scalability and reliability.
- Implemented authentication, authorization, and CORS for robust security.
- Built a responsive frontend using React and JavaScript, leveraging hooks for API integration, state management, and lifecycle handling.
- Utilized local storage to manage JWT tokens for secure session handling.
- Delivered a user-friendly interface with interactive tiles and intuitive input fields for simplified workflows.

Social Media Application (GitHub repo)

- Designed and developed a social media platform enabling user registration, login, and personalized feeds.
- Built core features such as user profiles, likes, follows/unfollows, and a dynamic feed displaying posts from followed users.
- Engineered a secure backend with SQL Server, C#, and Entity Framework Core, and ensured comprehensive business logic testing with xUnit, achieving 100% code and branch coverage.
- Developed a responsive frontend using React and JavaScript, integrating with APIs to manage data flow and state.
- Automated CI/CD pipelines using GitHub Actions and deployed the application on Microsoft Azure for scalability.
- Enhanced user experience with intuitive UI elements, including dynamic buttons for likes/follows and personalized content displays.

Choose Your Own Adventure Game (GitHub repo, live site)

- Designed and developed an interactive adventure game featuring over 100 dialogue options and multiple branching storylines, enhancing replayability.
- Implemented a directed graph structure to manage story progression, with nodes and links stored in a JSON file for dynamic dialogue flow.
- Added a save and load feature, enabling users to preserve and resume progress, enhancing user experience and engagement.
- Leveraged JSON parsing to load story data, enabling efficient storage and scalability for future expansions.

 Provided a captivating user experience by allowing players to make decisions directly impacting their character's journey and outcomes.

Weather Prediction Application(Capstone Project) (GitHub repo)

- Developed a Python application to predict weather trends using linear regression, providing accurate forecasts based on historical data.
- Created a secure login system with SQL for database management and Hashlib for password encryption.
- Designed an intuitive UI with dropdown menus, sliders, and buttons, simplifying user interaction.
- Visualized temperature predictions with interactive graphs, including mouseover functionality for detailed data insights.
- Delivered a responsive and user-friendly application, demonstrating strong data analysis and visualization capabilities.

School Roster API (GitHub repo)

- Developed a RESTful API in C# using ASP.NET Core and EF Core for managing users, courses, and their relationships with a SQL Server backend.
- Implemented a code-first approach and built CRUD endpoints to ensure data consistency and efficient interaction.
- Applied DTOs to optimize data transfer, prevent data loops, and enhance performance.
- Secured sensitive information with password hashing and salting techniques for secure storage.
- Followed Service-Oriented Architecture (SOA) principles to separate business logic and improve maintainability.
- Wrote unit tests with xUnit, achieving 80% branch and code coverage for business logic.

SKILLS

.NET Framework, C#, HTML, CSS, JavaScript, SQL, React, TypeScript, ASP.NET, EF Core, Git, Docker, Microsoft Azure, Agile, GitHub, Scrum, DevOps, SDLC, Python, C++, Django, NumPy, Pandas, Java, AIML

EXPERIENCE

Al Enabled Fullstack .Net Developer, Revature

Sep 2024 - Current

- Designed and developed multiple web and software applications in individual and collaborative environments using Agile methodologies.
- Built scalable and maintainable backend systems with C#, ASP.NET, and Entity Framework, ensuring high performance and reliability.
- Created RESTful APIs to facilitate seamless integration with frontend components and database systems.
- Enhanced user interfaces by implementing responsive web designs with HTML, CSS, JavaScript, and React, improving user engagement.
- Improved code quality and team collaboration by leveraging Git for version control and adhering to industry best practices.
- Achieved up to 80% line and branch test coverage by performing unit and integration testing with XUnit.
- Streamlined deployment processes by implementing CI/CD pipelines using Microsoft Azure and GitHub Actions.

Office Supervisor, TCS Communications

Oct 2019 - Dec 2023

TCS Communications provides fiber optic installation services.

- Provided ad hoc project support to multiple departments as needed, including AP/AR, project management, billing, construction, and data entry teams.
- Ran multiple reports daily and served as level one technical support for IT issues.
- Trained and supervised an eight-member team in data entry and GIS mapping.