Jacob Phillips

Software Engineer

📞 07444203226   @ jacobrphillipsdev@gmail.com   🔗 https://www.linkedin.com/in/jacobrphillipsdev/   📍 Milton Keynes, UK

SUMMARY

Proficient software engineer with experience in designing, developing, and implementing software applications. Utilising C# and .NET to write scalable, secure code with a knack for problem-solving.

PROFESSIONAL EXPERIENCE

Software Engineer

Fortis Cyber Security   📅 04/2024 - Present   📍 Milton Keynes, UK

Led in the design and development of a compliance management application

- Led the development of an internal compliance management application, using Clean Architecture principles to establish maintainable, scalable, and testable code.
- Produced over 20 technical documents, including detailed user stories, database schemas, and UI/UX wireframes ensuring 100% alignment with client requirements, meeting both functional and non-functional specifications.
- Partnered with an external development team to implement 15+ features, improving compliance tracking efficiency by 40% for end-users.
- Hosted and scaled solution in Microsoft Azure, establishing high availability and seamless performance for enterprise clients.

Software Engineer

TIDE Services   📅 10/2023 - 04/2024   📍 Huntingdon, UK

Responsible for designing, developing, and maintaining software applications

- Designed and developed scalable web applications using ASP.NET MVC, adhering to OOP and SOLID principles to improve maintainability and performance.
- Migrated legacy Exchange Server system to Twilio SendGrid for email functionality, writing 50+ unit and integration tests with NUnit to ensure seamless email delivery and system reliability.
- Acted as the focal point for production releases to AWS EC2 to ensure seamless deployments and 99.9% uptime.
- Improved development documentation and conducted code reviews in Azure DevOps, boosting team code quality and reducing technical debt.
- Migrated Python Lambda functions to C#/.NET, ensuring compatibility with organisational standards and extending application security support.
- Refactored SQL database stored procedures, enhancing query performance by 50% and reducing system latency.
- Integrated Redis caching into server-side code using AWS ElastiCache, achieving a 15% reduction in API response time and lowering RDS operational costs.

EDUCATION

Bachelor's in Computer Science

Oregon State University   📍 Corvallis, United States (ECampus)

HOBBY

Programming Content Creator

https://www.youtube.com/@JPtheProgrammer

📅 08/2023 - Present

Developed and shared educational content on YouTube, creating tutorials and practical examples to help learners with core programming concepts, data structures, algorithms, and cloud-based application deployment on Azure.

IMPORTANT LINKS

Github
https://github.com/jacobrphillips

Portfolio Website
https://jacobrphillips.dev/

PROJECTS

Instructor Hub

🔗 https://github.com/gschool-blue-ocean/instructor-hub-20?tab=readme-ov-file

Collaborated in a team of developers to design and develop a full-stack web application for managing instructor and student data using React, Express, Node.js, and PostgreSQL, enhancing educational workflows through dynamic scheduling and performance tracking.

Technology Blog

🔗 https://www.jacobrphillips.com/

Developed a fully functional blog using C# ASP.NET Core MVC with .NET Identity for user authentication, featuring secure account management, post creation, and comment functionality.

System Design Capstone

🔗 https://github.com/jacobrphillips/SDC

Designed and implemented a scalable backend system using Node.js and PostgreSQL, performing a performance analysis of distributed monolith, single-server monolith, and SSM with Redis to optimize API performance and database efficiency for high-traffic e-commerce operations.

SKILLS

C# | .NET | ASP.NET MVC | Python
SQL | Object-Oriented Programming (OOP)
Node | Express
RESTful API Development | AWS | Azure
Git | Visual Studio
UI/UX Wireframes and Mockups
Database ERD and Schema | NUnit
Unit Testing | React | JavaScript
TypeScript | HTML | CSS