# **Jacob Phillips**

## Software Engineer

### **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

## **Cyber Security Specialist**

**Fortis Cyber Security** 

Led in the design and development of a compliance management application

- Spearheaded the design and development of a compliance management application, producing over 20 technical documents, including user stories, database schemas, and UI/UX wireframes, ensuring a 100% alignment with client requirements.
- Partnered with the development team to implement 15+ features, improving compliance tracking efficiency by 40% for end-users.
- Utilised vulnerability assessment tools (e.g., Nessus, Tenable) to identify and remediate over 300 vulnerabilities across multiple client systems, reducing critical risks by 50% within 3 months.

## **Software Engineer**

**TIDE Services** 

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** 

## **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.

### **PROJECTS**

## **Instructor Hub**

https://github.com/gschool-blueocean/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**

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, singleserver monolith, and SSM with Redis to optimize API performance and database efficiency for high-traffic e-commerce operations.

## **SKILLS**

C#	.NET	ASP.NE	T MVC	Pyt	hon
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 T	esting	React	JavaS	cript	
TypeScript		HTML	CSS		

#### IMPORTANT LINKS



#### Github

https://github.com/jacobrphillips



#### Portfolio Website

https://jacobrphillips.dev/