CHARLES PAYNE

Recent Bachelor of Computing graduate (Software Engineering specialization) with a strong foundation in backend development using Golang and C#.NET Core. Proven ability to build RESTful APIs, gRPC services, and implement secure systems through extensive personal projects. Eager to apply problem-solving skills honed in cybersecurity to a backend developer role.

SKILLS

Programming Languages: C#, Golang, Python, TypeScript

Technologies and Frameworks: ASP.NET Core, Entity Framework Core, React, Tailwindcss, Redis, Docker, Git, gRPC, Rest APIs, Microservices

Cybersecurity: Vulnerability Assessment, Penetration Testing, Security Best Practices

PROJECTS

WonderPicAI – AI-Powered Image Generation Platform   06/2025

A full-featured, server-side rendered web application built in Go using Clean Architecture and Ports & Adapters. It includes email/Google authentication, Stripe-powered credits, and AI image generation via my own modular ComfyLite API. Designed to showcase production-grade backend skills with interface-driven architecture and modern frontend practices (HTMX, TailwindCSS).

StockTech – Fullstack Portfolio Tracker   05/2025

Developed a fullstack app using React/TypeScript and ASP.NET Core with clean architecture. Features include user authentication, stock search via Financial Modeling Prep API, portfolio management, and commenting. Used Entity Framework Core (code-first) and JWT for secure API access.

Taskflow – Microservices-based Task Manager   04/2025

Developed a secure, event-driven task management system using Go, gRPC, Redis Pub/Sub, Vault (for secret management), and Consul (for service discovery). Implemented authentication with JWTs, inter-service communication via gRPC, and email notifications on task assignment. Emphasized modular design, secure key handling, and scalable microservice architecture.

EXPERIENCE

MWR CyberSec   02/2022 - 08/2023
Cyber Security Consultant   Sandton

- Conducted vulnerability assessments and penetration tests for client applications.
- Delivered comprehensive security reports with actionable recommendations and remediation strategies.
- Collaborated with clients to implement security measures and security best practices.

EDUCATION

Bachelor of Computing, Specializing in Software Engineering
Belgium Campus ITversity • GPA: 81.1%   01/2019 - 03/2024

- Electives: Machine Learning, Internet of Things, Business Management
- Achieved distinctions across numerous subjects, maintaining an average grade of 81.1%