Yasir **Fayrooz** Software Engineer | Cyber Security

Melbourne VIC, Australia

☑ yasirfayrooz.com



A technology-agnostic software developer with a robust skill set encompassing languages like C#, Python, Rust, and front-end frameworks such as Angular and React. I have extensive expertise in software development and the implementation of complex data structures and algorithms when necessary (a big advocate for code simplicity). I have been instrumental in designing towards clean code, consistency, and well thought-out solution architecture. I hold a Bachelor's degree in Computer Science from RMIT University and additional studies in IT Security & Criminology from Deakin University.

SKILLS

Programming C#, Python, Rust, Rust, Typescript, Javascript, HTML5 & CSS3, Java

React, Angular, .NET, Next.JS, OAuth/OIDC, Tailwind, Langchain, Semantic Kernel, Frameworks

Spring/Spring boot

SQL Server, PostgreSQL, Elastic Search, Redis, CosmosDB, MongoDB, Pinecone, Odrant, Databases

Azure Al Search

Tools Rider, Visual Studio, VS Code, Cargo, git, Node, Eclipse, Maven

Cloud Azure, Google Cloud, App Services, Service Bus, Blob storage, APM, Azure Functions

Operating systems Mac OS X, Windows Server, Windows, Android, Linux distros (Kali Linux)

> Clean architecture, Microservices, Event Driven Architecture, Messaging Queues/Streaming, Other

Docker, OpenAl



PROFESSIONAL EXPERIENCE

Present September 2024

Senior Al Engineer | Senior, AGILE INSIGHTS, Remote

- > Led the development of our cutting edge AI solution Agile AI-One used by government agencies. Contributed to existing open source projects & internal IP.
- > Used Azure AI Services & Document Intelligence to process documents with OCR extracting capabilites and Speech Intelligence for voice to text translation. Utilising Semantic Kernel with yaml Handlebars prompting to develop agents and agentic applications.
- > Implemented safety features with Azure Open AI which includes Content Filtering and Prompt Injection Shielding to ensure safe and secure use of Gen Al.
- Maintained the backend solution architecture for our internal AI project utilising DDD and Clean Architecture principles with .NET Minimal APIs and AI chat event streaming.
- > Coordinated the integration of Semantic search/Hybrid search & RAG techniques in Azure Al Search. Developed a powerful custom indexing solution for data ingestion from blob storage. Applied a Message-Queue for heavy write scenarios to be able to ingest thousands of files with minimal load and redundancy support.

.NET 8 | MediatR | CQRS | Semantic Kernel | Azure Al Search | Document Intelligence | Speech Intelligence Azure Al Services CosmosDB React DDD Generative Al Message Queues Azure Service Bus

September 2024 August 2022

.NET Developer & AI | Mid-Senior, PREEZIE, CBD Melbourne

- > Championed the AI project at preezie, leveraging semantic kernel and facilitating monthly Microsoft meetings from Redmond USA to remain at the forefront of technology advancements in Generative AI. Implemented advanced prompt engineering techniques, Vector search with embeddings, Retrieval Augmented Generation (RAG), Al Agents, Semantic search and more.
- > Developed innovative solutions using microservices and clean architecture, enhancing existing legacy systems while integrating modern technologies like Angular and React for both backend and frontend development.
- > Solely migrated large scale analytics data to a more cost effective cloud architecture, reducing monthly expenses by 40% with minimal downtime.
- > Single-handedly re-architected and optimized a critical legacy software system, improving and cutting import speeds by over 50% and ensuring future scalability while collaborating closely with senior leadership. Lead backend developer for a successful new product, nextbuy, contributing to significant ARR growth and achieving cash flow positivity.

.NET 6/7/8 | Elastic Search | Redis | CosmosDB | Semantic Kernel | React & Angular | PostgreSQL | DDD Artificial Intelligence

August 2022 March 2021

Software Engineer, MOTOROLA SOLUTIONS, Burwood Melbourne

- > Co-developed a multi-tenancy-enabled full-stack solution for CrimeStoppers Tasmania's online crime reporting platform, garnering media recognition and awards. Designed for public anonymity, the platform features real-time report processing, media upload capabilities, and advanced management tools.
- > Modernized a legacy product to enhance customer service, transitioning it from a Winforms application into a web application with fine-grained permission controls and Google account authentication. Improved productivity and decreased support needs significantly.
- > Managed over-the-air updates for RACV-owned tablets, implementing necessary software patches and security updates through client liaison, ensuring device functionality and security compliance.
- > Working closely with mission-critical clients such as Ambulance Victoria, Victoria Police and Fire Rescue Victoria doing UAT Tests for software patches. Following close guidelines and liaising with staff to ensure efficient speedy delivery of patches.
- > Developed a web application to efficiently configure hundreds of routers to be installed in Ambulance Victoria vehicles. The app performed various file I/O reading and writing in an easy to use user interface

.NET 5/6 | Angular | MongoDB | SQL Server | OAuth2.0 | Identity Server | Devops | CI/CD | WPF | Winforms

March 2021 January 2021

Software Developer, TRADE VIEW, St Kilda Melbourne

- > Developing and testing algorithmic trading bots using key indicators and various tactics learned during the job.
- > Addressing customer support tickets on a daily basis. Assisting customers with their algorithms and debugging code.
- > Adding features to their custom developed CMS system.
- > Helped develop and launch a crypto trading site integrating live feeds and price tracking.

Metatrader 5 C C# React Zoho

LANGUAGES



ACHIEVEMENTS

- > Attendee of 2022 NDC Melbourne's Software Developer conference 5 day pass
- > 3rd place from 74 teams total. Best AI developed at RMIT. Used A* Search, Expectimax & Reinforcement Learning/Q-Learning with function approximation
- > Developed and hosted my own terminal themed portfolio site from scratch

EDUCATION

2018-2020 Bachelors degree in Computer Science @ Royal Melbourne Institute of Technology (RMIT) University

2014-2017 Bachelors degree in IT Security @ Deakin University Burwood Campus

2014-2017 Bachelors degree in **Criminology** @ Deakin University Burwood Campus



GITYAS - FOUNDER 2023-PRESENT

www.gityas.com

 Founder of a cross-platform Git GUI desktop application built with a Rust backend & a React Vite frontend using ShadCN & Tailwind CSS components.

- Implemented OAuth2 with GitHub integration for connecting to repositories, viewing commits, pushing, merging, branching, tagging and stashing.
- Using advanced data structures and algorithms to implement a directed acyclic graph to visualise commits on a HTML

- Achieved efficiency using crates such as notify-rs to implement operating system level file listeners to listen to file changes and provide real time UI feedback.

- Working with asynchronous functions using tokio, idiomatic error handling using anyhow, lifetime and borrowing management rules on Rust & secure key storage on operating systems credentials storage using the keyring crate.

Rust Tauri crates React Vite tokio git2-rs notify-rs serde keyring request anyhow

PORTFOLIO 2022-PRESENT

www.yasirfayrooz.com

Created my own terminal themed portfolio website to refresh my front-end developing skills in my own time.

Next.Js React Tailwind CSS Firebase Cloudflare



Adam Stephenson

Al Lead, AGILE INSIGHTS

Provided on request

Provided on request

Zen Farhat

Fullstack Developer & SS Manager, Frontend Simplified

Provided on request

Provided on request