



CONTACT

 0226320648

 caspertyson99@gmail.com

WORK EXPERIENCES

GEA AVAPAC (INTERN)

Nov 21 - Now

Developed software solutions for powder packing machines, and programs that helped internal processes. Particularly, I created a lot of custom SQL queries for their procurement team and project managers.

Technology included:

- Access SQL
- VBA
- Practical networking

THE QUAY (MANAGEMENT)

Jan 19 - Apr 20

Before pursuing a career in software, I worked as a bar manager at The Quay Restaurant.

My job included:

- office administration
- hiring and training staff
- leading a team
- creating new menus

CASPER TYSON

SOFTWARE ENGINEER

PROFESSIONAL PROFILE

Currently I am in my third year studying Software Engineering. Leading up to pursuing a career in software, I had always found myself tinkering with some IT project. The unlimited scalability and worldwide connectivity has always been of key interest to me, but, at the core, I really just love solving a great problem.

CAREER OBJECTIVE

I want to be involved any coding - but particularly back end development. I really like coming up with creative/unique ideas, but sometimes the simplest solutions to complex problems are the most satisfying!

I particularly love working with a team working through a problem, communicating ideas and sharing skills or experiences that might contribute to the current working solution.

PERSONAL SKILLS

Ownership of Work

At my former role as a bar manager, I was solely responsible for the performance of the bar - including the performance of staff.

Initiative

At my current role with GEA, whenever I hit a big problem with my projects, I endeavour to spend at least 30 mins trying to solve the problem before going to my boss.

Fast Learner

Within a group project at Uni, our assignment required us to utilise a technology stack unfamiliar to us all. Here I became the go to person as I quickly learnt the in and outs of this new tech.

EDUCATION

University of Waikato 2020-2023

Bachelor of Engineering with Honours BE(HONS) in Software

PROFESSIONAL SKILLS

Java, C# and Python

I have completed multiple programs of each language in varying complexities through University & personal projects.

React, PHP, JavaScript, HTML & CSS

I have created multiple websites with Vanilla Javascript, and recently have learned React.js to build an app for the Police.

SQL and InfluxDB

Access SQL is a big part of my work at GEA, as well as InfluxDB. Otherwise, any CRUD application I have built utilised either PostgreSQL or MySQL.

Practical Networking & Cyber Security

I have built a network of VM's simulating the internet, utilising both IGP's and BGP's. As well, I received an A for a paper on Cyber Security.

Microsoft Apps

For work at GEA, I have created multiple apps for internal processes utilising: Power Apps, AI Builder, Flows and Sharepoint logic.

PROJECTS

INDUSTRY PROJECTS

R&D Acquisition & Analytics - PostgreSQL/MQTT/Ubuntu Server
Created and demonstrated a technology stack that acquired data from a Program Logic Controller which was recorded and displayed with interactive statistics on a monitor. MQTT, Time Series Database, Azure IoT Edge on Ubuntu Server 18.04, OPC Server Software and PostgreSQL.

Project Management Software - Visual Basic & Access SQL
Designed and created a project management software with Microsoft Access SQL and VBA. The relational database app is built to accommodate daily usage of 3 teams with 5 people in each team, where the app behaviour is tailored to each user's clearances and designated team.

OTHER PROJECTS

Multitasking Kernel - Assembly
Multitasking kernel that allows interaction with Parallel and Serial I/O, and utilises exceptions and interrupts - written in assembly language.

Regex Compiler Finite State Machine - Java
Regular expression compiler takes a regular expression as an input, and prints out the corresponding finite state machine as the output. The pattern search takes the finite state machine and a body of text as the input, and outputs which lines have strings that correspond to a match of the regular expression.

Police Demo App - React/Javascript/HTML/CSS
Created a PostgreSQL, Express, React and Node.js stack proof-of-concept application for Waikato Police - deployed to Heroku. Utilised MapBox and Passport.js.

Secure File Transfer with TLS - Java
Small, secure file transfer system that allows a client to securely request a file from an authenticated server - using Transport Layer Security.

These projects and more are on: github.com/caspterson

HOBBIES/INTERESTS

JRE, Flagrant 2 and Lex Fridman Podcast, Old Fashioned Cocktail, Travelling, and Electric Guitar