Thomas Taylor

51 Roewood Lane,
Macclesfield,
SK10 2PQ

+44 7913 363288

tom@planccck.xyz

Current Employment

Software Developer
bet365

Stoke-on-Trent, UK
July 2023 - Now

› Working with Golang & Erlang as part as a team tasked with improving the scalability of the backend system.
› Rewrote IP lookup information server reducing memory usage by over 60% & reducing the need of a large bare metal server, so a distributed cluster of virtual machine nodes.
› Wrote automation scripts for CI/CD pipelines, release packaging, and load testing.
› Helped plan future work using JIRA collaborating with multiple areas of the business to understand the requirements of applications used by multiple teams.

Employment History

Software Developer
Infinity Tracking

Salford, UK
November 2021 – July 2023

› Infinity Tracking is a call tracking company, allowing businesses to correlate website traffic with sales and customer calls. I worked as a part as a full stack team developing the conversation analytics stack, providing a transcription service and operator metric scoring system.
› I moved the existing backend from bare metal servers into AWS, utilizing SQS and lambdas to create a pipeline which allowed a much more granular process, providing better testing, troubleshooting, and monitoring.
› I added a multitude of features to the platform including webhooks, operator metric aggregation, and a platform wide monitoring system integrated with Grafana and pager duty which turned into the primary early warning system for any large issues.

Software Developer
JUXT

Milton Keynes, UK
September 2019 – September 2020

› I helped develop their open source database crux, primarily on internal bug fixes. I also started the initial work on providing performance metrics
› I supported and helped develop software for a client in the American agriculture industry. The application involved aggregating real time alerts from their systems to a website. In this project I was heavily involved setting up the Elastic Beanstalk service and automating the build for CI/CD with CodePipeline inside AWS.

Apteco
Data Analysist and Python Developer

Warwick, UK
July 2018 – September 2018

› Build and analysed a database system containing 120 years of Olypic games records, and subsequently wrote a blog post showing my findings.
› Created a web app displaying various d3 visualisations using their python API with the django web framework.

Education

Distinction in M.Sc. Data Science
Manchester Metropolitan University

Manchester, UK
September 2020 – November 2021

› Dissertation titled "Using variational autoencoders with machine learning algorithms in cybersecurity applications" achieving 91%.
› Overall average mark of 83%.
› Modules covered statistics, machine learning, database management, high performance computing, and AI methods

2:1 B.Sc. Hons in Computer Science
University of Birmingham

Birmingham, UK
2016 – 2019

› My dissertation was on identifying and analysing security vulnerabilities of the WAP-EAP-TTLS Wi-Fi protocol.
› Modules included Networks, Network Security, Intelligent Data Analysis and Advanced Functional Computing.

Skills

› Golang	› Java
› Terraform	› Zsh
› Bash	› GNU/Linux
› AWS	› Docker
› Python	› Git
› SQL	› Latex

Concepts

During my Masters, I studied a variety of data science fields including ***Machine Learning***, ***Big Data***, ***Data Management***, and ***Probability Theory.***

At the University of Birmingham the modules that I studied covered topics such as ***Encryption***, ***Networking*** and ***Network Security***. In I***ntelligent Data Analysis*** I covered using ***vector and matrix spaces*** to identify ***clusters*** and ***regression patterns*** in large quantities of data. As well as learning the theory in University I have also practiced Software Development in the workplace, most predominately ***agile development***. The same goes for ***Version Control*** as I have now been using ***git*** for over 8 years.