

Profile

A versatile systems engineer with experience in solution architecture, business analysis and project management looking to develop technology experience in the wider business sector. Having spent four years growing and maturing a consultancy startup I'm looking to influence ways of working both in culture and technical process, as well as progress my experience in development tools and a new business domain.

Work Experience

Systems Engineering Consultant

Principle One – Business and Technical Consultants in UK Law Enforcement

October 2019 – Current

Having joined Principle One within their first year of business, I have had many internal responsibilities alongside a wide variety of customer delivery positions where I have had the opportunity to practice a range of consulting disciplines and develop many technical skills.

Customer facing disciplines:

- Software delivery: building prototype and production systems for national law enforcement customers. Working in and leading agile delivery projects, planning work increments and monitoring progress. Delivering cloud solutions using AWS, software applications with Python, C#, Java/Typescript and Docker. Including documentation and customer handover.
- Software architecture: building patterns for layered architecture principles (MVVM, MVC) and microservice/serverless architectures. Writing and consuming system architecture documentation (UML, ArchiMate)
- Technical architecture consulting: analysing organisational technology environments to propose opportunities for maintenance cost saving, streamlined efficiency, supporting 3rd party system procurement and change implementation. Solving complex problems in constraining stakeholder/technology/political environments.
- Business analysis: end user interviews to identify system pain points, building process models (BPMN), writing and refining user stories to a DoR/DoD state. Measuring engineering delivery MI reports to reduce modelling inconsistencies and unlock delivery insight for stakeholders.

Key technical skills:

- AWS and Azure CSP solution design, implementation, orchestration (IaC) and monitoring
- Python and C# .NET software development, including automated unit/UI/E2E testing frameworks (BDD)
- Front end web app framework development : Angular, React, Javascript/Typescript, HTTP REST APIs
- Databases (MsSQL Server, MySQL, PostgreSQL, MongoDB), SQL
- Docker: extensive use of docker, compose, image build optimisation, security and networking, volumes and data,
- Git and DevOps tooling: GitHub/GitLab/Azure DevOps, CI/CD
- Productivity tooling: MS 365 (office, power automate, power BI, forms), Atlassian (Jira, Confluence)

Internal responsibilities:

- IT architecture ownership: design and maturing the technical toolset to manage internal accounts and devices to be customer/framework compliant.
- Refining engineering delivery approach: drawing retrospective insight from customer delivery roles to build an "engineering delivery handbook" for common practices and monitoring for the general consulting delivery
- Commercial bid support: providing technical and delivery insight for government framework bid proposals
- Security working group: establishing a risk management plan, reviewing threats and proposing/trialling mitigations
- Interviewing: reviewing candidate applications for technical roles, carrying out technical interviews and providing feedback to hiring directors
- Mentoring: supporting junior staff with their career development and role specific technical or stakeholder issues

Education

Computational Fluid Dynamics MSc

2018/19 – Cranfield University – **First Class**

Learning the discipline and techniques of numerical simulations for physical fluid phenomena.

- Frequent large group research presentations.
- Thesis project: Development of a Python Traffic Flow Modelling Tool

Mathematics BSc

2015/18 – Newcastle University – **First Class**

Awarded with the John Anderson memorial prize for graduating with highest results in year group, and Outstanding Contribution to the School of Mathematics Award for support to the school with teaching local school students and arranging events.

- Managing accounts of over £10K as Mathematics society treasurer.
- Numerical programming in MatLab, ForTran
- Academic document processing in LaTeX.

Interests

- Cycling and running – I have developed and deployed an open source angular web app to pull and geographically overlay Strava activities. See the [website here](#), and [GitHub repo here](#).
- Painting – Spare time commission watercolor paintings