**Kevin Kuszyk**

**DevOps Engineer | Software Engineer | Architect**

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# Executive Summary

* 20 years’ experience architecting, designing and building enterprise and consumer applications.
* Proven DevOps engineer. Has built and maintained numerous CI / CD pipelines, monitoring, and logging stacks.
* Successfully delivered on-premises, cloud, hybrid, and containerised solutions.
* Experienced software engineer working in a number of languages including C#, TypeScript, JavaScript, Python and SQL.
* Experienced Agile practitioner and scrum master.
* Maintainer and contributor to a number of open source projects.

# Technical Skills

I have almost 10 years experience as a DevOps engineer building out CI / CD pipelines on a number of platforms including Team City, AppVeyor, GitLab CI and Octopus Deploy. I have used these tools to deploy software to both on-premises and cloud environments.

More recently I have been working as a platform engineer, automating the deployment of applications & the infrastructure they run on, and ensuring monitoring & alerting is in place.

Prior to this, I worked as a software engineer delivering solutions on the Microsoft stack.

A genuine thirst for knowledge and learning new technologies has helped to keep my skillset current. I have experience of a wide range of technologies and tools including:

* **Programming**: C#, TypeScript, JavaScript, Python, Bash, PowerShell.
* **Frameworks:** ASP.net MVC, Web API, SignalR, Node.JS, Bootstrap, Angular, jQuery, WCF, WF, Entity Framework.
* **Development:** Visual Studio, VS Code, Dependency Injection, Unit Testing, TDD, Continuous Integration, Message Queues, Event Sourcing, NoSQL, Source Code Management, Git, Subversion, Performance Testing, Profiling.
* **Servers:** IIS, SQL Server, MongoDB, Active Directory, GitHub, GitLab, TeamCity, AppVeyor, Octopus Deploy, Puppet, Grafana, Splunk, Sensu, ProGet, MyGet, Jira, Confluence.
* **Containers:** Docker, ECS, Fargate, Kubernetes, Docker Swarm.
* **Virtualisation:** Amazon Web Services, Azure, Vagrant, Packer, Hyper-V.
* **Operating Systems:** Linux, macOS, Windows.
* **Security:** OpenID, OAuth, Single Sign On, Role Based Security, SSL, VPN, Firewalls.
* **Methodologies:** Agile, Scrum, SOA, Waterfall, ITIL.

# Professional Experience

## NHS Digital

January 2017 – December 2019

### Contract DevOps Engineer | Platform Engineer

June 2019 – December 2019

I worked with several teams to both rationalise their cloud infrastructure and bring existing legacy products to the cloud. We used a mix of containers and native AWS services to build cost effective and elastic solutions.

Continuous integration & delivery pipelines and infrastructure as code were the foundation for the projects we delivered. I built pipelines for the projects we delivered and acted as a consultant advising and mentoring other teams in their adoption of these tools and techniques.

Key projects and skills included:

* Terraform, Git, GitLab CI, Docker, AWS (ECS, Fargate, EC2, S3, DynamoDB, IAM, SSM, CloudWatch, etc), Packer, Spunk, Grafana, Jira, Confluence.
* Working with the reference data team we re-platformed the ODS API Suite and DAPI products from running in expensive EC2s with Rancher to ECS Fargate. This resulted in a 50% cost saving and benefited from autoscaling. The performance and reliability of the products was improved while costing much less to run.
* Built out a micro-services platform for reference data product consolidation. It had a continuous delivery pipeline with the time to live reduced from several weeks to several hours. We were deploying to production several times per day.
* Built out service monitoring and dashboards using CloudWatch, Grafana and Splunk.
* Worked with the SUS+ team to containerise and autoscale components in preparation for moving the hosting of the product from on-premises to AWS.
* Assisted the data science team to build out CI / CD pipelines to package and deliver their products to production.

### Contract Software Engineer | DevOps Engineer

April 2018 – May 2019

With the switch over date for the new Cancer Waiting Times system approaching, I was engaged to assist the team complete the reporting deliverables.

The system uses a micro-services architecture. Patient data flows through the system using event sourcing, and the various processing components are all de-coupled from one another. The data is finally persisted in a SQL database for reporting where it accessed by users in an MVC / Web API app.

In addition to the reporting work, I also assisted with stabilising the system in production, developing monitoring dashboards & logging infrastructure, and on-boarding an off-shore team.

Key projects and skills included:

* C#, MVC, Web API, Event Store, Entity Framework, Docker, Team City, GitLab, Octopus Deploy, ProGet, PowerShell, Puppet, Grafana, Splunk, Sensu, SpecFlow, Jira, Confluence.
* Built infrastructure to take monthly report and extract snapshots and surface these as CSV files to users.
* Refactored Event Store as a persistent data store out of the system to improve reliability.
* Built Grafana and Splunk dashboards to visualise data so we can understand how the system is performing.
* Use Puppet to manage and deploy changes to Windows and Linux servers across the estate.
* Moved source code from Subversion to GitLab and introduced branching strategy and Git workflows.
* Assisted with on-boarding the Indian off-shore team.

### Contract Software Engineer | DevOps Engineer

January 2017 – March 2018

Initially a three-month contract to assist the iViewPlus features team, it was extended repeatedly over the following year.

iViewPlus is a reporting application allowing users to query and visualise data stored in SQL Server Analysis Services cubes. The frontend is an MVC / AngularJS app which we re-wrote in Angular 6. It consumes a REST API built in Web API.

The admin backend is a mix of MVC apps and REST APIs. Data is synced from the backend admin app to the frontend via Event Store.

Key projects and skills included:

* C#, TypeScript, Angular, TSLint, AngularJS, MVC, Web API, Event Store, Entity Framework, Docker, Team City, GitLab & GitLab CI, Octopus Deploy, ProGet, PowerShell, Puppet, SpecFlow, Cucumber.JS, Jira, Confluence
* Wrote a suite of CLI tools to automate setting up new machines and to streamline day to day dev tasks. New machine setup was reduced from 2 – 3 days to 2 hours.
* Large refactor of the deployment pipeline to make the admin backend multi-tenant.
* Added numerous features to frontend and backend apps.
* Re-write of frontend app in Angular 6 and TypeScript.
* Package and deploy reusable JavaScript components via internal NPM registry hosted on ProGet.
* Wrote custom TSLint rules to ensure new code met coding guidelines.
* Helped the team switch over to run external dependencies such as Event Store, Splunk etc in Docker containers instead of installing locally.
* Built and deployed a Selenium cluster on Docker Swarm with continuous deployment using GitLab CI.

## Capita Asset Services

### Contract .net Software Engineer

June 2016 – December 2016

A six-month contract to assist with build of the Prudential’s online ISA application. The application uses a micro-services architecture running in Azure. The customer facing and admin apps are written in Angular with MVC Core APIs. Access to the API is restricted using OAuth access tokens issued from an identity server.

Key projects and skills included:

* C#, MVC 5.1, Web API 2.1, .net Core, MVC Core, Azure Service Bus, Document DB, Azure Service Fabric, Azure Cloud Services, Azure SQL Database, TypeScript, JavaScript, Coffee Script, AngularJS, Entity Framework, AutoFac, Node.JS, Express.JS, Team City, Octopus Deploy, Hubot, Docker, OAuth.
* Contributed code to over a dozen micro-services which are deployed to Azure.
* Contributed code to the Angular front end apps.
* Built the DSF command line tool to clone all git repositories in the DSF universe, fetch or pull changes for a branch, and produce a NuGet dependencies report.
* Pioneered the use of Hubot and built the Team City notifier script.
* Built Docker containers to run Hubot on a Linux host in production.

## City of York Council

### Contract .net Software Engineer | Scrum Master | Technical Architect

May 2014 – May 2016

Initially a six-month contact to design and build City of York’s responsive repairs Total Mobile solution, my contract was extended to design and build their gas servicing, gas repairs and social care Total Mobile solutions. As scrum master, I introduced Agile working practices to the Council and coached Council staff in the transition from a traditional waterfall approach to Agile.

In January 2016 I took on the role of technical architect for the implementation of Oracle RightNow CRM. During this time, I continued to coach and mentor the new team of on-staff Total Mobile developers.

## thebigword

### Contract Web Application Developer

September 2013 – April 2014

I worked on a number of projects, including:

* Adding new features to thebigword’s Interpreting Management System (IMS), including the new linguist self-sourcing feature, and ZenDesk integration.
* Built features for the new TMS product including real time preview, and real time linguist job offers.

## AlphaRooms.com

### Contract Web Application Developer

April 2011 – July 2013

Three discrete engagements working on the following projects:

* Design & build of an intranet application to manage their Google AdWords accounts.
* Build a mobile web version of their new Vacenza.com website.
* Build a web service to scrape flight data from airline websites.
* Introduced continuous integration.

# Open Source

I contribute to and maintain a number of open source projects including T4MVC, R4MVC, Fluent Assertions, Fluent Assertions for MVC, Fluent Assertions for Ninject, and Test Framework for NUnit, Moq and NSubstitute. For more information, visit [kevinkuszyk.com/projects](http://www.kevinkuszyk.com/projects).

# Education

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| BSc (Hons) Computing and Management Science 1st Class Honours | Sheffield Hallam University1997 - 2002 |
| A Levels Computing, Business Studies, Physics and Maths | Colchester Sixth Form College1995 - 1997 |

# References

Available on request.