Nayeem Syed

smn7818@gmail.com   AI Automation Engineer, Solutions Architect/DevOps Engineer
+44 7476 911731
+351910088007 (whatsapp)   Github: http://www.github.com/developerinlondon

Over 25 years experience in successfully implementing AI Solutions, Automations, Software Engineering, Infrastructure Architecting and Solutions Development for Public and Private Sector clients.

Technical Expertise:
AI -
 * AI Agent Building, n8n workflow, custom model training, memory building using vector database (Qdrant, SurrealDB, groqCloud, webRTC).
 * n8n, elizaOS, Hugginface, LangChain, stable diffussion, ollama, qdrant, pinecone.
Cloud –
 * AWS (ECS, EKS, DynamoDB, Redshift, VPC, Lambda, RDS, EMR, Athena, Konesis, SageMaker, etc),
 * GCP (GKE, GAE, GCE, GCS, BigQuery, DataFlow, DataPrep, DataLab Google Deployment Manager, CloudBuild, CloudRun, BigQuery, Cloud Pub/Sub, CloudSQL etc),
 * knowledge on Azure, Govt Cloud and Alibaba Cloud
CI/CD – Jenkins, CircleCI, TravisCI, CloudBuild, Github CI/CD, Artifactory
Config Management – Ansible, Chef, Puppet, Saltstack
Cluster Technologies – Kubernetes, Openshift, some Rancher
Monitoring – ELK, Stackdriver, Graphana, Prometheus, Monit, Sensu, Nagios, NewRelic, Airbrake, Zabbix
Testing – BDD using Rspec, Cucumber and Turnip, infrastructure testing using Test-Kitchen, Beaker, Mole-cule, ServerSpec, infrastructure testing using customized AWSpec
Databases- Oracle/PL-SQL, SQL Server, Postgres, MySQL,CloudSQL, CloudSpanner, some NoSQL (Cassan-dra, MongoDB, DynamoDB, CloudSQL, Bigtable, BigQuery)
Ops tools – Github, Bash, Python, Terraform, Packer, Jira, Confluence, Nexus, Artifactory, Nolio, repo

Operating Systems – Linux (Ubuntu, CentOS, SuSE etc), Windows Server/NT, Mac, some Solaris
Front-End – Jquery, BackboneJS, HAML/SLIM, CoffeeScript, CSS3, HTML5, Twitter Bootstrap.
Languages - Rust, Flutter, Ruby On Rails, Python, Java, C++, C, Go, Perl, some Assembly.

Professional Certifications:
Amazon Certified Cloud Practitioner (2019)
Google Certified Associate Cloud Engineer (2019)
Google Certified Professional Solutions Architect (2019)
Certified Master Perl Programmer (BrainBench 2000)

Summary Of Companies I worked in:
Educational - Oxford University Press, University of Cambridge, University of East London, Kensington and Chelsea College.
Public Sector – Ministry Of Justice, Criminal Records Bureau, QinetiQ, British Oxygen Corporation, Kent County Council, Bedfordshire County Council, Aberdeenshire County Council, CCIP (Paris Chambre of Com-merce), NHS Skills-For-Health.
Agencies – BCGDV, Meelogic, Cognizant, AvenueA/Razorfish, Kieon, Radley Yeldar, Davison Williams, JPY Plc, DataCap Business Solutions, Kainos, Elsewhen
Financial – Barclays Plc, Forbes, Zurich Financial Services, Knightsbridge Fund Services.
Media - Guardian, Financial Times
Energy - British Gas, EDF Energy.
Other – Microsoft Corporation, United Nations, FIA, UNESCO, Air France, Holiday Lettings, ITN, Flightline Essex Ltd, EMC Belgium, SAAB Technologies, Sweden, Cronycle Ltd, Quickbrowse LLC., Honda, Fremantle-Media, ZumeF1, Juno Records, Travis Perkins.

Experiences:

Freelance AI Automation, Agent Development Work   **March 2024- Present**
- · Developed n8n-based automation workflows integrating Retrieval-Augmented Generation (RAG), short-term, and long-term memory.
- · Built fullstack Rust Application that gave a nearly 10x improvement over a nodeJS application it replaced. Extremely efficient webRTC communication software.
- · Built email and calendar automation agents for scheduling and workflow optimization.
- · Designed custom voice agents trained on proprietary knowledge bases for personalized responses.

GCP DevOps Engineer, **Elsewhen, UK**   **May 2022 – Feb 2024**
- Implemented automation using Terraform for their applications deployment, created a simplified mechanism to deploy their applications across multiple environments and multiple clients.
- Spearheaded the adoption of GitHub Actions and YAML-based build systems for scalable and automated CI/CD processes.
- Provided consultancy on integrating cloud security best practices into DevOps workflows, enhancing the security posture of software delivery.
- Optimized their release process and automations using triggers and hooks in Cloudbuild and Github Actions and CI/CD.
- Helped with bringing the team up to speed with DevOps principles and concepts so they can self-manage their work. The application stack was mainly Google App Engine and CloudSQL and Big-Query for backend.
- Technologies include, GCP, Github Enterprise, Artifactory, Python, Bash, Terraform, Python

Senior DevOps Engineer, EDF Energy, UK   **September 2019 –May 2022**
- Designed and implemented organisational best practices for GitHub Enterprise, including policy configuration, authentication protocols, and structural optimization.
- Led the concept-to-approved-design transition for key DevOps components: GitHub EMU, GitHub build compute, and JFrog Artifactory.
- Provided hands-on expertise in orchestrating DevOps transformations, ensuring compliance with industry and enterprise standards
- Setting up, Configuring and supporting their Data Science Platform on AWS for their big data project using Github CI/CD.
- Analyzed and recommended CI/CD pipeline enhancements aligned with Githib Enterprise standards and best practices to improve efficiency and maintainability.
- Implemented Unit Tests for Terraform Modules and Platform Integration Tests to ensure the expected results are achieved. This also required customizing Awspec to allow custom tests and API calls to run the tests that are needed.
- Deploying a Standalone Sandbox Zone for DS machine Learning projects that consisted of EMR, S3 buckets, Athena and Glue.
- From time to time assisted the Enterprise IT team with configuring, updating and managing their Github Enterprise which is run privately for security.
- Technologies include, GCP, Github Enterprise, Artifactory, Python, Bash, ELK, Jenkins, Groovy, AWS, Terraform, Python, Molecule, EMR, Kinesis, Athena, Glue, Awspec, some Ansible etc.

Lead DevOps Engineer, Motability Operations UK   **October 2017 –April 2019**

- Implemented release and versioning mechanism across different components of their Platform Service, automated using a mix of Jenkins, custom Python/Groovy scripting, Ansible and Terraform.
- Configured a Transit VPC using Palo Alto for EGress and Ingress for the company platform accounts using Github Actions for deployment.
- Worked with leading their Platform Team in implementing Openshift for their applications.
- Implemented detailed testing methods for infrastructure code testing, code versioning library to manage multiple versions of different sets of repositories.
- Technologies include, Github Enterprise, Bash, Jenkins, Groovy, AWS, GCP, Ansible, Python, Molecule, Openshift, Kubernetes, ServerSpec/SpecInfra, Terraform, ELK etc.

DevOps Engineer, Kainos Software (Ministry of Justice)   **October 2016 – September2017**
  - Helping configure their Deployment and DevOps pipelines, configuring automation and release process.
  - Technologies include, Terraform, ELK, Bash/Python, GCP, Jenkins, Zabbix, Ansible, Ruby, ServerSpec, etc.

DevOps Engineer, Travis Perkins   **August 2016 – September 2016**
  - Helping the core DevOps team build new additions to the existing Terraform + Ansible based AWS Framework to service other teams in building a flexible mechanism that fits in well across the board.
  - Reviewing existing Infrastructure code testing policy and mechanisms, adding layers on Java applications for logging, configuring ELK stacks, etc.
  - Technologies include, Jenkins, Bash, AWS, Terraform, Ansible, Python, Kubernetes, ELK.

DevOps Engineer, Meelogic AG, Germany   **February 2016 – July 2016**
  - Preparing an automated build pipeline across their teams to streamline the development process. Advising and implementing DevOps best-practices.
  - Developing Platform As a Service solution using kubernetes and config management tools for Infrastructure as a code.
  - Creating streamlined deployment mechanism for multiple environments for different application stacks.
  - Technologies include, Bash, Jenkins, AWS, Rails, Node, Python, Kubernetes, Saltstack, Puppet.

AWS Specialist DevOps Engineer, Landbay Partners Ltd   **January 2016**
  - Was responsible for implementing a resilient DevOps architecture and build/delivery pipeline for their microservices and applications using AWS, Jenkins, Docker containers and Amazon ECS Clusters. Code Reviewing and Pair programming with existing DevOps engineers to troubleshoot hard to fix issues.
  - Technologies Include: Jenkins, Linux, Docker, Consul, HaProxy, AWS, TDD, Terraform, Bash, Python

Lead DevOps, Barclays Plc   **July 2015 – October 2015**
Leading a Continuous Integration Team that is responsible for:
  - Preparing a central Release Management and Deployment Strategy that is rolled out and followed throughout the different   Development Teams across the company. This involves setting up a blueprint, planning a rollout strategy and implementing the solution and handle any issues during the rollout and managing the resources involved..
  - Identifying manual processes and inefficiencies and improving them through automation.
  - Technologies Include: Jenkins, Linux, Nexus, Nolio, Puppet, Chef, AWS, Kafka, Bash, Python, ELK

Senior DevOps Engineer, Connected Homes, British Gas, London, UK   **October 2014-May 2015**
Working with a team of experienced DevOps Engineers. Working closely with the CTO in
  - Creating a delivery workflow using Jenkins for software provisioning.
  - Working out a good Project Management solution to meet business expectations. (Github, Confluence)
  - Creating a scalable infrastructure that can handle high volumes of backend processing. (Heroku, AWS, OpenStack, Jenkins)

- Using Config Management Tools to automate deployment of different server stacks and having comprehensive test coverage for them. Primarily Puppet/Hiera, but also some Chef, Ansible and Docker-based Deployments.
  - Preparing Different Stacks and automating their build-pipelines in Jenkins.
  - maintain their existing Cassandra clusters and troubleshooting performance and scaling issues. Also dealing with some Casssandra DBA Admin.
  - Technologoies included different flavours of Linux (including Ubuntu and CentOS), Puppet, some chef and ansible, Packer, Python, Bash, Ruby and some NodeJS. AWS, Some Cassandra and PostgresQL

Solutions Architect, Cronycle Ltd, London,, UK   **January 2014-October 2014**
Leading a team of about 10 experienced developers. Working closely with the CTO in
  - Creating a delivery workflow
  - Working out a good Project Management solution to meet business expectations. (Github, Redmine)
  - Creating a scalable infrastructure that can handle high volumes of backend processing.
    (Heroku, AWS, CoreOS/Deis, Mesos, Jenkins)
  - Implementing a good development workflow using Dev, Test, Staging, UAT and Production environments.
  - Developing on their Backend Applications and batch processes.
  - Technologoies included different flavours of Linux, AWS, Python and Ruby Scripting, some Chef and Ansible for Config Management.

Consultant/Architect, DataCap Business Solutions, Surrey, UK   **February 2011-December 2013**
Worked on various client sites in implementing a good software architecture, infrastructure setup/configuration and best practices. Here are some highlights:
  - Oxford University Press: Worked on building their backend AWS solution, configuring RDS clusters, autoscaling and
    backup/disaster recovery, developing good test plans. Setting up Puppet-Master and Puppet for automated deployment.
  - ZumeF1: Developing their backend software and configuring and optimizing hardware infrastructure using AWS, Ruby-on-Rails, Rspec and Opscode Chef.
  - Technologoies included different flavours of Linux, Ruby and Python coding.

Developer/Architect, Kent County Council/Criminal Records Bureau, Kent, UK**September 2009-January 2011**
Worked on automating the CRB Checking process so the check can be done in 2 weeks instead of the usual 6 weeks. Used a variety of technology stacks, but primarily Perl, Rackspace Hosting and Jquery. Was involved heavily in integrating with the CRB API.

Consultant/Architect, DataCap Business Solutions, Surrey, UK   **June 2008-June 2009**
Worked on various client sites. Here are some highlights:
  - NHS: Implementing a good User-Acceptance Testing Framework using Rspec to their already existing health e-learning platform for doctors/health professionals. Was also involved in enhancing some functionalities in their existing software.
  - Obit: Implemented BT API in their ISP. Was involved in configuring an exising Java/Perl project and making it production ready   for launch.

Developer/Consultant, Knightsbridge Fund Services, Londont, UK   **November 2007-May 2008**
Was hired to work out the business logic of a Hedge Fund they acquired. Had to shift through several hundred thousand lines of code on Oracle, PL/SQL, Java and some Python/Perl. Was later involved in rewriting the fund calcuation tools that works out the fees for the sales people and traders and integrating the acquired Hedge Fund's software to their core system.

Developer/Consultant, Microsoft Corporation/Financial Times, UK   **June 2007-October 2007**
Was primarily involved in optimizing and fine-tuning various speed and performance issues in their website (FT.com) until a new version was rolled out. So had to work within the constraints of a large corporation. They had a backend using Java, Object Oriented Database and Apache and Squid. Was able to make a 30% increase in speed and performance over the course of my time there.

Developer/Architect, Juno Records, London,UK   **September 2006-June 2007**
Worked on building and structuring a scalable backend to their already busy website. Had to use a mix of Perl, Java and Ant for automated deployment on their custom Metal Racks in a Docklands Data Centre. Was also involved in their development projects which included optimizing processing of different music file formats, exposing APIs and bulk imports for distributors and labels.

Developer/Architect, Albert Ltd ,UK   **November 2002-June 2006**
Worked on implementing their Knowledge Management Software AMI to various clients across Europe and some in the US. Had to use a mix of different technologies depending on the needs of the clients. Their backend code was written in C. So from time to time was also involved on their backend project to meet client demands and ensuring it meets the requirements.

***Developer/Architect,* DivisionX Ltd**   January **2000-June 2002**
Worked on various client and inhouse projects. Their main project was a online game called CatGames that simulates a football management game. Was also involved in a project called Gamebod, which was at the time a community of gamers and a forum. Mainly worked in Perl mostly through the work. There was some admin work involved in managing their routers, servers etc.

Network Administrator/Architect, Agni Systems Ltd   January **1995-December 1999**
Agni Systems: I started my professional career working for an ISP (largest in Bangladesh) building their backend system that dealt with Radius servers to work out the bills for users and also deal with different types of business users. Was heavily involved in the ISP networking work, such as setting up and configuring servers, installations, troubleshooting, etc.

Education: A'Levels University of London – 1995
Hobbies: Travelling, Latin Dancing, Acting/Singing, Photography, Poker.