Stephen Hall

sdhpfa.com

SYNOPSIS

20+ years of commercial software development, the majority of which at a senior level.

10+ years dedicated to predominantly C#-based projects.

Experience of full application lifecycle on multiple projects, utilising a variety of languages and encompassing web, desktop, client/server and cloud solutions on both Linux and Windows.

EDUCATION

UNIVERSITY OF BRIGHTON
MSc Internet Application Development
2004 | Brighton, UK

UNIVERSITY OF NEWCASTLE
MSc Geophysics with Planetary Physics
1995 | Newcastle, UK

UNIVERSITY OF BIRMINGHAM
BSc Physics with Astrophysics
1994 | Birmingham, UK

SKILLS

PROGRAMMING

Multiple Projects:
C# • Java • C++ • C++/CLI • SQL • Powershell • Python • Javascript • HTML • CSS • PHP • Perl • Shell • Fortran

Small Projects/Courses:
• React • Angular • Typescript • WPF • SOAP • WSDL • LaTeX

TOOLS
Visual Studio • Visual Studio Code • Microsoft Azure • Git • • Docker • Kubernetes • Helm • Terraform • Google Cloud • Azure Bot Framework • Web API • Service Bus/Pub-Sub • NodeJS • NUnit • dotTrace • dotMemory • Unity • Postman

OPERATING SYSTEMS
Windows • Linux • macOS

LINKS

LinkedIn:// **stephendavidhall**
Portfolio:// **sdhpfa.com**

EXPERIENCE

MATRIX42 | PRINCIPAL SOFTWARE ENGINEER
2023 - Present | Bucharest, Romania
Roles:

- **C# microservices developer** - Hired for my experience as a microservices developer, I am an integral part of the team responsible for extending Matrix42's IT/ESM software with new cloud-based microservices. I have been closely involved in this greenfield project, from initial discovery and prototyping to the development and maintenance of the core services underpinning the cloud ecosystem.
- **Interviewer** - As Matrix42 expands its team to develop new microservices, I am involved in the recruitment process, conducting technical interviews for positions ranging from Junior to Tech Lead.

IVANTI | STAFF SOFTWARE ENGINEER
2020 - 2023 | Bucharest, Romania
Roles:

- **C# microservices developer** - As a member of the Automation team, my primary role was to develop microservices that support Ivanti's infrastructure and workspace management tools. The main goals were to create decoupled, sustainable, and unit-tested code, with a focus on simplicity over complexity. Notable projects included porting code from .NET 4.7 to .NET 6 and developing a chatbot service to aid end-user interaction. Additionally, I was instrumental in deploying the services to Azure Kubernetes Service.
- **Agile developer** - Using agile practices such as scrum-sprints, backlog grooming, retrospectives, and code reviews was crucial to the project's success. These practices helped me produce robust code and develop and maintain relationships with my remotely-based colleagues.
- **DevOps engineer** - A feature of Ivanti team practices was full-stack ownership of the solutions. This meant that I was closely involved in all aspects of the development process, from source code management and pipeline maintenance to testing, monitoring, containerization, and deployment.

SCHLUMBERGER | CONTRACT CONSULTANT AND DEVELOPER
Sep 2019 - Apr 2020 | Bucharest, Romania
Roles:

- **Quality analysis & improvement** - I was contracted for six months to support a team in meeting a crucial deadline and addressing software stability issues. Recognized for my expertise with the technology stack (mainly C#, Microsoft Azure, Google Cloud), I was ideally suited to be parachuted into the project and quickly take up an active role. During this period, I resolved most of the significant outstanding issues, and by the end of my contract, the project was back on course to meet its Quality Release Criteria.
- **Feature development** - In addition to addressing quality issues, I implemented a significant cloud data access feature required for the next release. This built on previous work I had done related to data transfer in and out of the cloud data storage infrastructure.
- **Mentoring** - To avoid future issues, I helped my colleagues adopt a more robust code review system and gain a clearer understanding of how the software architecture could be used to reduce stability issues.
- **Flexible worker** - During my time on this project, I worked remotely with colleagues around the globe, from Houston to Bangalore. As in my previous roles, this required a proactive and flexible approach to time management, recognizing that good and timely communication greatly improves software quality. One advantage of working for a multinational company is the flexibility and diversity that come from teams spread across multiple time zones.

•

SCHLUMBERGER | SENIOR SOFTWARE ENGINEER I & II
2004 - 2017 | Gatwick, UK | Tunis, Tunisia | Bucharest, Romania
Roles:

- **C# application developer** - I successfully developed the OmegaConnect plugin to enable interoperability between the Omega and Petrel seismic processing systems (SPS). This project was largely C#-based and required developing a C++/CLR wrapper layer to fully utilize Omega's backend. The main challenge, which was achieved, was providing performant access and display of TB-scale pre-stack seismic data while maintaining usability.
- **Project lead** - I was the project lead for the OmegaConnect Petrel plugin. As the primary developer and architectural design lead, I managed contributions from cross-disciplinary teams. Over the six-plus years in this role, I ensured the project met all Quality Release Criteria at every checkpoint.
- **Java application developer** - As part of the Omega Infrastructure team, I developed components for the Java-based Omega SPS and played a key role in porting the Linux-based software to Windows. In addition to Java, I supported C++ and Fortran portions of the backend.
- **Cloud application developer** - My final project at Schlumberger involved developing a Google Cloud-based data transfer infrastructure to support the transition of the company's processing software to the cloud. Initially, this required a system of Java UIs and Python daemons interacting with pub/sub to move data in and out of cloud storage. Further work included developing an Angular frontend to enhance user interaction.
- **Web application developer** - I created popular web applications to assist users of the Omega SPS. These applications were implemented using JSP, JavaScript, XHTML, PHP, and Perl. The primary goals were project status tracking and querying the Oracle backend and Linux filesystems.
- **Requirements analyst** - I regularly conducted requirement gathering exercises in close coordination with experts. This included eliciting requirements, analyzing their cost/benefit, and capturing them using appropriate tools (latterly, TFS). Additionally, I tracked the status of requirements and planned project timetables to ensure targets were met on time.
- **Flexible worker** - Coordinating projects with geographically diverse, cross-disciplinary teams while meeting challenging deadlines required proactive communication and a flexible approach to time management.

SCHLUMBERGER | JUNIOR TO SENIOR GEOPHYSICIST
1996 - 2003 | London, UK | Gatwick, UK
(Initially with Western Geophysical, which was acquired by Schlumberger in 2000)
Roles:

- **Web Champion** - I successfully promoted web usage within the UK seismic processing department through presentations and by creating online tools to aid adoption.
- **Web application developer** - I developed small but widely used web applications (HTML, JavaScript, CGI, Shell, Perl) to aid knowledge transfer and support practices such as peer review.
- **Seismic data processor** - I processed data from marine seismic surveys for oil and gas, initially using the IBM MVS/XA-based IQueue SPS and later the Linux-based Omega package. My primary task was to determine the best parameterization for the algorithms used to process data, requiring analysis of previous stages and interaction with clients such as Shell and BP.