# James Andrews     Curriculum Vitae

Mob: +44 7707 124 215                                              11 Carlton Avenue, South Croydon CR2 0BZ

james@jgandrews.com                    www.jgandrews.com                              github.com/andrewsjg

## Profile

I have over twenty years experience in the IT industry in engineering and architecture, for the last 15 years I have been working in senior technical , architecture and engineering roles up to principle engineer level within the financial services industry in London.

I currently work at **IG Group** as an Infrastructure and  Security **Technology Architect** . Responsible for the strategic direction of infrastructure and platforms at IG.

Prior to IG Group I worked as a **Cloud Security Architect** for **Global Security Services** at **FIS** (previously Worldpay). I have held several roles at FIS in the security organisation. These include: **Security Designer, Principal Engineer - Security Engineering** and **Cloud Security Architect.**

Prior to Worldpay I worked as an **Infrastructure Engineer/Architect** and **DevOps Engineer** at **Marex Spectron**

Previously to this I worked as an **eTrading Engineer** and as a **Product Specialist** in the **Pre-Sales** organisation for a software vendor in the low latency messaging and trading area.

I am an IT generalist with a broad range of skills across many products and disciplines and have worked in a wide range of industries across my career. I pride myself at being adaptable and able to take on any role and responsibilities therein. I consider myself a good technical leader and work well leading strong engineering teams and delivering enterprise scale technology platforms and services. I believe this mays me well suited to a principal architecture or technical leadership role.

## Formal Qualifications

- Batchelor of Science, Computer Science; Canterbury University, Christchurch New Zealand

# Employment History

**IG Group** - Technology Architect. London UK , 2021- Present

Responsibilities include making key design decisions, producing designs, strategies and providing engineering leadership for IG Group Infrastructure, application platforms and security functions.

During the first year of my role at IG took the role of lead architect for IG's Observability strategy and seeing it through to implementation. I designed the platform, wrote standards and specifications and selected tooling and vendors to implement the strategy. This involved the following:

- Define and establish the Observability Engineering capability at IG
- Define the IG Observability strategy
- Design the observability platform to implement the strategy
- Engage and evaluate vendors for tools and products required to build the platform
- Onboard vendors and integrate products into the architecture
- Provide technical leadership to the Observability Engineering team
- Provide technical leadership to the SRE and Development teams in order to get Observability principals into our software development lifecycle.
- Create local development resources to assist developer onboarding
- Present at industry events
- Participate in a global roadshow to promote the new platform
- Continued to establish Observability Engineering as a self sustaining capability
- Work with Observability Engineering to establish the next iteration of the platform based on learnings and evolving standards and technology

While still doing the lead architect for Observability role, in my second year I also took on the containerisation and container orchestration and platform modernisation strategy and the evolution of IG's CI/CD platform. This has involved designing a new container orchestration platform working closely with developers and platform engineers to establish the capability. In addition to selecting vendors and tooling to support the capabilities. This has involved the following:

- Establishing a new CI/CD capability built around GitLab SaaS
- Building a community of practise for DevOps processes for developers and infrastructure engineering
- Designed and Establishing a distributed container orchestration platform using Hashicorp Nomad
- Establishing a service discovery function using Hashicorp Consul
- Helped establish an engineering team to deliver frictionless provisioning of infrastructure
- Defining the strategy for using cloud native tooling and approaches for infrastructure delivery both on-premises and on the cloud platforms
- Provided consulting to the security teams around cloud security and secrets management
- Worked closely with the product teams to help deliver infrastructure services as products
- Built and established key initiatives to improve developer experience
- Created multiple communities of practice around DevOps, platform and cloud
In my role I am a trusted advisor to senior tech leadership and business lines

**FIS (Previously Worldpay)** - Cloud Security Architect / Principal Engineer Security Engineering / Security Designer; London, UK 2016 - 2021

My role at FIS was as a cloud security architect and designer at FIS. My key responsibilities are to design security systems to meet business, security and regulatory requirements, product evaluation and selection, team mentoring, innovation, security automation and expansion of security capabilities within the organisation.

I was hired as an infrastructure engineer and generalist with some security background. I firmly believe that having a solid foundation across the spectrum of IT and infrastructure in particular is key to being able to deliver scalable and sensible security systems.

FIS is a forward looking FinTech company with many leading edge initiatives including integration of cloud with on premises infrastructure, software defined networking, container based workloads, infrastructure as code, policy as code. All of which require security input. Security is central to all of Worldpay's business. Key responsibilities and Achievements:

- Leading initiatives to build out cloud visibility
- Leading initiatives to build out cloud SIEM integration
- Consulting and up skilling SOC teams for handling cloud security event flow
- Designing secrets management strategies to support secure handling of secrets within agile development processes
- Consulting with business teams on cloud security requirements
- Taking part in working groups to engage development organisations with security teams
- Consulting with development teams to ensure security best practices are followed
- Lead designs for security products and deployments
- Leadership for security agile delivery team
- Mentoring and leadership of engineering and operational teams
- Provide engineering input to other teams for security initiatives and requirements
- Champion the use of security tools and tool sets within the IT business
- Champion the use of automation capabilities
- Build out the use of data collection and analysis tools and create use cases for the security and IT business areas
- Work with cloudOps teams to ensure they are getting the best use of security tooling and meeting security requirements
- Enabling cloud use cases within the security requirements
- Develop policy as code implementation
- Enable leveraging new software defined networking technologies to build out security controls and processes
- Work with agile teams to enable a DevSecOps way of working and embed security processes into all systems early and often
- Building prototype tools in Python and Golang

  In addition to my technical role, I have been involved in developing the security organisations ways of working to include agile practices. As part of this I have qualified as a SAFe 4.6 Program consultant, although I am not a fan of SAFe.

**Roles prior 2016** Abbreviated for brevity, further detail on request**:**

**Marex Spectron** - Infrastructure/ DevOps Engineer  / Architect ; London, UK 2015-2016

**BNP Paribas** - eTrading Engineer (Interest Rates and Credit); London, UK 2012-2014

**Informatica** - Ultra Messaging Product Specialist (pre-sales); London, UK 2011-2012

**BNP Paribas** - eTrading Engineer (Interest Rates and FX, low latency engineering) ; London, UK 2007 -2011

## Other

- Married Father of one son
- Volunteer Steward and Guide at **Bletchley Park**
- Computing, retro computing and Cryptography history enthusiast
- Avid reader of fiction and non-fiction
- **2nd Dan Black Belt** in Karate - Still actively training
- Hobbyist developer (**Golang,** and **Swift**)
- Sometime technology blogger ([jgandrews.com](jgandrews.com))
- I can do card tricks