Gregory Gulrajani

Software engineer, architect and leader based in Edinburgh, Scotland

E-Mail | LinkedIn | Github

💻 Technical Experience

Head of Software Development at Nucleus Financial @ Nucleus Financial *(Jan 2022 - Present)*
A platform for managing wealth.

- Alignment of security practices though multiple development teams.
- Setting strategy for growth by devolving all organisational decision to individual teams.
- Outlined technology roadmap for supporting multiple wrap platforms.

Software Architect @ Nucleus Financial *(Jan 2017 - Jan 2022)*

- Oversaw all internal development and reported on current and future development to relevant stakeholders.
- Grew development team and guided the hiring criteria and process.
- Designed and assisted in porting of all batch and multithreaded ETL processes to AWS Lambda and Fargate infrastructure.
- Designed and assisted in moving our monolith Java application to AWS Fargate.
- Created GraphQL API to replace existing Hypermedia API which reduced bandwidth costs by 13%.
- Help design and develop integration test strategy that allowed us to release multiple times per day.
- Attend most Scrum ceremonies for four teams.
- Participate in code reviews and planning sessions.
- *Technologies used:* AWS Lambda, Faragte, S3, ELB, DynamoDB, Docker, GraphQL, Java, Postgres, Oracle, React, Javascript, Prometheus,. Grafana.

Lead Developer @ Nucleus Financial *(Jan 2015 - Jan 2017)*

- Introduced and designed and co-developed Docker infrastructure for CI/CD pipeline.

- Introduced and started migration away from SSR web applications to React client side frontends.
- Introduced and developed Hypermedia RESTful API.
- Developed browser agnostic printing server side printing solution that leveraged existing React front-ends to produce PDF output.
- Developed offline caching mechanism of millions of rows that increased the render time of client facing apps and allowed Nucleus to meet regulatory reporting requirements.
- Mentored and managed a team of 5 developers.
- Participate in code reviews and planning sessions.
- *Technologies used:* Docker, Maven, Jenkins, React, Java, Jira, Gerrit, Oracle.

Senior Developer @ Nucleus Financial *(Jan 2013 - Jan 2015)*

- Designed modular platform that can easily adapt to new business requirements.
- Developed app-store that allows 3rd party vendors to integrate and sell tightly integrated applications to the platform users.
- Developed SOAP bridge that allows auditing, ACL, and billing.
- Developed document store that allows searching, bulk upload, and auditing.
- Designed and maintained development and production servers.
- *Technologies used:* Java, Spring, Wicket, CXF-Soap, Unix, Oracle (Linux)

Contract Developer @ Royal London *(Aug 2012 - Dec 2013)*

- Removed all SQL queries from in-line Java code.
- Improved efficiency of calculations by 20% reducing the need for 2 app servers in production.
- Found and fixed major bug with time and date handling.
- Helped with migration to JSF.
- *Technologies used:* Java, JSF, Spring

Contract Team Lead @ Vebnet / Standard Life *(Jan 2010 - July 2012)*

- Led team that consisted of 3 to 7 people. Conducted daily stand-ups and carded progress of team members. Conducted daily code reviews by having all developers submit diffs of their un-submitted work. Identified stronger developers and assigned them to work in more sensitive areas and allowed them to peer review weaker developers' code.
- Identified major performance bottlenecks in Hibernate and increased batch processing performance. Identified and repaired many subtle hibernate mapping

issues and other critical Hibernate based exceptions.

- Debugged development and runtime class loader issues on multiple development and production containers.
- Used profiling tools on UAT and production servers to find production performance bottlenecks.
- Ported and refactored legacy code from an earlier version of the application. Developed unit tests for legacy code ported into the application.
- Developed a user facing JavaScript module that reduced the need for clients to request developers' and analysts' time for bespoke requirements.
- Was responsible for UAT and production support for batching processing issues. Managed, assigned, and tracked all bugs assigned to the the batch processing component.
- *Technologies used:* Java, Rhino JSR-223, Wicket

Application Designer @ BSkyB *(Jan 2009 - Dec 2009)*

- Using Agile and Refactoring techniques, I refactored a project that consisted of many separate but tightly coupled components into a few separate components with clear scope and intent.
- Identified in-house MVC add-on frameworks, unit tests, and RPC patterns that could be replaced or augmented with third party libraries. The changes cleaned and simplified the existing code base as well as increased developer productivity.
- Designed and began development of a rule-driven product selection application. Wicket was chosen as the graphical framework after comparing other similar higher level graphical toolkits such as GWT and JSF. Because of the shifting nature of the requirements, iterative development was used. The application is required to be completely dynamic and bring together product, pricing, promotion, and discount data into a clear and extensible application.
- Migrated billing application from IBM's JAX-RPC SOAP stack to Spring-WS using JAX-B, Axiom, and JMS. The application benefited from faster start of iteration binding generation, configuration and debugging.
- *Technologies used:* Java, Spring, Websphere, UNIX (Linux), JQuery, JMS, SOAP

Contract Developer @ Allianz *(Oct 2007 - Jan 2009)*

- Developed a Seam user interface for a messaging based batch processing application in collaboration with external developers.
- JSF UI components to replace functionality of Lotus Notes application.
- Developed JSF UI components to replace functionality of Lotus Notes application.
- Extended Hibernate reverse engineer script to annotate POJOs with JAXB annotations and added detection of cyclic dependencies.

- Implemented SOAP based interfaces.
- Integrated associated projects into Spring framework.
- *Technologies used:* Java, Seam, SOAP, JMS, Hibernate-JPA, DB2, AS400

Contract Developer @ NCR Corporation *(Mar 2007 - Oct 2009)*

- Developed UML use-case scenarios using Nokia's NFC handsets and NCR's ATM and Point of Sale equipment.
- Developed 6 month project plan for two developers.
- Developed NFC Java midlets for Nokia NFC mobile phones.
- Developed REST/SOAP API for server operations and mobile phone targets.
- Wrote an OPOS NFC/RFID reader service object for NCR FastLane platform.
- *Technologies used:* J2ME, NFC, RFID, C++

Developer @ German Research Center for Artificial Intelligence *(Aug 2004 - Mar 2007)*

- Developed Plone/Zope database driver for Sesame OWL database.
- Wrote application to synchronize the relational database and OWL database.
- Developed Plone archetypes to allow ACL'ed CRUD access to OWL data.
- Managed and mentored new employees for various programming tasks.
- *Technologies used:* Python, Unix, Plone, OWL, Sesame

Developer @ Max Planck Institute *(Aug 2002 - Mar 2004)*

- Developed and designed XML searching framework. Developed XML Schema parser for XML Search engine.
- Developed doubled buffered visualization components for multimedia linguistic annotation tool.
- Integrated the JNLP launching protocol into all applications developed at the Max Planck Institute.
- Developed and designed multimedia searching framework software.
- *Technologies used:* Java, JNI, Swing/AWT, Oracle

📌 Personal

- Father
- Avid hill runner Strava
- Photography https://www.instagram.com/gulrajanigregory/ https://www.blipfoto.com/gwak