Clint Johnson

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PROFESSIONAL SUMMARY

Experienced software engineer with over 5 years of experience delivering enterprise-grade distributed systems within agile, cross-functional teams, primarily in Banking and Fintech. Specialised in the architecture and development of regulatory-compliant, observable, and robust microservice-based cloud native solutions.

TECHNICAL SKILLS

Expertise: TDD, Functional Programming, OOPs, Distributed Systems, Microservices
Backend: AWS, Java 17, Python, Spring Framework, Junit, Mockito, Camunda, GCP
DevOps: Docker, Kubernetes, Helm, Terraform (IaC), ArgoCD (CI/CD), Istio (Service Mesh), Datadog (Observability)
Databases: Kafka, PostgreSQL, MongoDB (NoSQL), Redis, DynamoDB, S3
Developer Tools: Linux, Git, Jira, Confluence, UML, C4 Models

CAREER HIGHLIGHTS

Consistent Excellence: **4-time** winner of the Spot Excellence Award at Deloitte for exceptional contribution.
Efficiency Accelerator: Saved Dell **125+** hours of manual labour per week through intelligent automations.
Talent Cultivation: Shaped Deloitte's engineering future through **70+** technical interviews and training initiatives.

EDUCATION

The University of Manchester <div align="right">UK</div>
MSc Advanced Computer Science, Specialisation in AI; Expected Distinction — *Sep 2023 – Sep 2024*

Shiv Nadar University <div align="right">India</div>
Bachelor of Technology in Computer Science, Minor in Mathematics; GPA: 8.79/10 — *May 2015 – May 2019*

EXPERIENCE

Deloitte, Converge BankingSuite

Software Engineer 3 (Technical Lead) — *Jul 2022 – Aug 2023*

- **Leadership**: Led a 4-member backend team in the development and successful delivery of key **digital banking** components namely **card payments, accounts, funding, and IVR** for a cloud native Banking as a Service.
- **System Design**: Designed **event-driven** solution architectures following banking industry best practices and BIAN (Banking Industry Architecture Network) guidelines. Produced regulatory-compliant OpenAPI specifications, C4 models, data models, and sequence diagrams. Effortlessly managed architecture reviews with senior architects.
- **Agile Expertise**: Performed agile ceremonies such as development **effort estimation**, **sprint planning** and task **delegation**. Collaborated with the product team to analyse and prioritise requirements. Planned integration architecture with vendors. Provided support throughout the **SDLC** to QA and DevOps teams.
- **Mentorship**: Mentored junior developers through code and design **reviews**. Championed **best practices** and maintainable code. Created company-wide training modules for Spring Cloud libraries.

Software Engineer 2 — *Nov 2020 – Jul 2022*

- **Orchestration & Decisioning**: Owned the customer onboarding journey end to end. Developed Spring **microservices** and built ArgoCD pipelines for **CI/CD**. Pioneered a business process-driven microservice orchestration using BPMN & Camunda for **workflow automation**, along with DMN for **decision management**, enabling integration of onboarding business rules, logic and regulations across microservices.
- **Internal Tooling**: Built a vendor-agnostic, declarative, **distributed tracing and logging library** for Spring applications with configurable log formatting and PI data masking. Developed helm charts to deploy a trace collector in the Kubernetes cluster to aggregate traces and logs from applications and Envoy proxies, and export data to Datadog. Integrated the solution across **100+** microservices across **18** Converge Products, supercharging the platform's observability and developer productivity.
- **Cloud Native on AWS**: Delivered an **ML-driven** POC within a **2**-month timeframe to streamline scanned EOB document processing. Implemented a serverless, event-driven architecture solution using AWS MSK (Kafka), Python Lambda functions, DynamoDB, and Amazon Textract (OCR).
- **Security**: Revamped existing **authentication** components to incorporate Secure Remote Password protocol and MFA with AWS Cognito as IAM, mitigating security risks.

Dell
Software Engineer *Jan 2019 – Oct 2020*

- **Test Driven Development**: Developed and maintained Spring-based **RESTful** microservices following TDD for Dell's internal mobile applications. Wrote tests ensuring over **90%** test coverage, fixed bugs, and iteratively deployed to Cloud Foundry using Docker, Kubernetes and Jenkins.
- **Automation**: Led a two-member team in implementing a Java-based automation pipeline for monitoring and reconciling Dell's B2B client purchase orders. The system flags unprocessed orders and generates weekly email reports, saving approximately **125** hours per week in manual labour for the sales team.
- **Code Reviews**: Conducted peer code reviews upholding high code quality standards.

Centre for Analytical Finance, Indian School of Business
Research Intern *Apr 2018 – Jul 2018*

- Devised **algorithmic trading strategies** in Python based on time series analyses, F-Score, and pairs trading. Backtested the strategies on historic stocks and futures market data, with pairs trading in particular outperforming major indices and delivering a consistent **27%** higher annual average return, even in bearish markets.

Hasura (Unicorn Startup)
Product Development Intern *May 2017 – Aug 2017*

- Full stack development with JavaScript, NodeJS, ExpressJS, JQuery, GraphQL, Postgres and Hasura backend. Produced technical documentation, created tutorial blogs and tested the platform.

PROJECTS

Deep Reinforcement Learning for Algorithmic Trading | *Python, PyTorch, Optuna* *Apr 2024 – Present*

- Proposed a novel **group-agent reinforcement learning based trading strategy**. Backtested on historical US stock market data and benchmarked performance against traditional machine learning and reinforcement learning based trading strategies.
- Extended stable-baselines3 (RL framework) using PyTorch. Engineered a custom trading Gym environment. Automated hyperparameter optimization using Optuna.
- Generated strategy performance report tearsheets with visualizations, key performance metrics and benchmark comparisons.

FinRED-ml | *Python, Sklearn* *Feb 2024 – Mar 2024*

- Implemented machine learning based **relation extraction** for a financial news dataset published in paper "FinRED: A Dataset for Relation Extraction in Financial Domain, 2022" and achieved comparable accuracy to benchmark models.

VOLUNTEERING

Anumana Code Academy
Python Tutor *Nov 2023 – May 2024*

- Trained 10 middle school students in Python programming, fostering problem-solving skills and critical thinking skills.