

# Fern Leigh Corcoran

Software Engineer | SDET | Technical Consultant

Manchester, UK | [website](#) | [github](#) | [linkedin](#)

## Profile

Software Engineer and SDET with six years of experience across Thoughtworks and independent consultancy. Expertise in building high-performance frontend interfaces (React, Next.js) and robust backend logic (Node.js, Java, Clojure), underpinned by a 360-degree perspective on quality from high-level ISO 9001 strategy and Systems Analysis to granular TDD and contract testing within complex microservices. Recognised as a Subject Matter Expert in accessibility at Thoughtworks, I am adept at identifying architectural vulnerabilities through rigorous system deconstruction and root cause analysis.

## Core Technical Skills

- **Analysis and QA:** End-to-End (E2E), Regression, Sanity, and Smoke Testing.  
Frameworks: Jest, Cypress, Playwright, Selenium, Karate. API Testing: Postman, Swagger. Contract Testing, Web Accessibility (WCAG 2.2)
- **Languages and Frameworks:** JavaScript, TypeScript, React, Next.js, Vue.js, Node.js, Java, Clojure, Spring/Springboot, Quarkus, Spring, SQL., MongoDB
- **Quality and Process:** ISO 9001:2015 Quality Management Systems (QMS), Quality Auditing, CI/CD pipelines, DevOps practices, Agile methodologies, Requirements Analysis, Technical Documentation.
- **DevOps & CI/CD:** Continuous Integration / Continuous Deployment, Jenkins, CircleCI, GoCD, GitHub Actions, Azure Pipelines.
- **Cloud and Infrastructure:** Git, Docker, AWS, Azure, GCP, Terraform (functional knowledge of infrastructure automation).
- **Methodologies:** TDD, BDD, Agile/Scrum, ISO 9001:2015 QMS, Root Cause Analysis

## Career Experience

### Freelance / Contractor | QA, Automation & AI Solutions Engineer

2026 – Present

- Executing exploratory and functional test cycles across diverse platforms to identify and document software defects.

- Training Large Language Models via code-specific data annotation, logic verification, and RLHF.
- Generating professional diagnostic media and bug reports adhering to strict crowdtesting quality standards.
- Providing full-stack development and technical consultancy including, CI/CD, Test Automation, and LLM integration.
- Building software solutions with a focus on high-fidelity frontend interfaces and robust backend logic.
- Performing technical requirements analysis and strategy for small businesses to ensure long-term system reliability.
- Implement automated data visualisation tools using D3.js and managing deployment on cloud platforms.

#### **Key Projects:**

- Building a bespoke ERP & CMS with integrated AI to streamline processes for an established Start-up.

## **S&A Academy | Senior Technology Trainer**

**2025 – 2026**

- Designed and delivered industry-aligned curricula, including a bespoke four-week intensive bootcamp and advanced modules on OOP, SOLID principles, Debugging, Refactoring, and Design Patterns.
- Designed and delivered specialised training modules focused on software testing, DevOps, and automation.
- Designed and assessed curricula for Level 4 developers, establishing technical benchmarks and quality standards for engineering cohorts.
- Delivered targeted coaching and code reviews to support apprentices in meeting Distinction criteria for their End-Point Assessment (EPA).

#### **Key Projects:**

- Designed L4 Software Developer Apprenticeship Programme.
- Designed ISTQB aligned Software Testing Programme.

## **Freelance | Software Engineer and Technical Consultant**

**2024 – 2025**

- Consulted for start-ups, SMEs, and sole-proprietors to determine requirements and align technical strategy for bespoke software builds.
- Engineered custom internal systems and customer-facing websites as an independent contractor.
- Developed and deployed native applications tailored to specific client specifications.
- Provided technical tuition and mentorship on software engineering principles and best

practices.

### **Key Projects:**

- Developed a life coaching platform with a personalised members portal, dynamic course hosting, and algorithmic content recommendations.
- Engineered a native mobile application featuring social forums and dynamic data retrieval for the US market.
- Developed proprietary IoT software for vintage camper monitoring, integrating physical sensors to automate safety checklists and system tracking.

### **Sabbatical 2023 to 2024**

- Focused on personal development during US visa processing.
- Hiked a long-distance section of the Continental Divide Trail (CDT), requiring significant logistical planning, endurance, and risk management.
- Renovated vintage RVs, managing electrical system overhauls and project timelines.

## **Thoughtworks | Consultant Software Engineer**

### **2019 – 2023**

- Developed full-stack solutions for government and enterprise clients using React, TypeScript, Java/Spring, and Clojure within strictly Agile environments.
- Engineered cloud infrastructure and containerised microservices using AWS, Azure, GCP, Terraform, Docker, and Kubernetes.
- Built comprehensive test suites across the full pyramid, including Unit, Integration, Contract, and E2E, ensuring automated testing as a core Definition of Done.
- Developed contract tests for complex microservice architectures using Swagger and automated API suites with Postman to ensure service reliability.
- Served as SME for Web Accessibility, leading comprehensive overhauls of corporate and client projects to ensure equitable technology standards.
- Collaborated in Three Amigos sessions and paired frequently with QAs to define data strategies and quality benchmarks for complex codebases.
- Implemented event-driven architectures using Quarkus and Event Sourcing within high-scale enterprise environments.
- Mentored junior developers and steered inclusion initiatives, contributing to disability and neurodiversity policies within the engineering department.

### **Key Projects:**

- Global Fuel Company: Built a bespoke micro-app framework to enable regional app development with shared features and testing.
- UK Government Body: Delivered an event-sourced internal application to track and record 700+ digital services.
- UK Financial Institution: Developed event-driven microservices to determine postgraduate loan eligibility using complex logic.

- Data Strategy: Collaborated on a comprehensive data strategy for a large international travel company.
- Education Provider: Engineered a management and reporting product using React, .NET, and Terraform.

## Manchester Digital | Development Coach

2017 – 2019

- Coordinated the development and launch of the Level 4 Software Developer Apprenticeship, ensuring all curricula aligned with the Government Trailblazer Standard.
- Managed the end-to-end recruitment and onboarding process for engineering cohorts across multiple partner organisations.
- Collaborated with industry experts to translate professional requirements into structured learning frameworks and technical benchmarks.
- Provided coaching and professional development support to apprentices, overseeing their progress against the apprenticeship framework.
- Ensured programme compliance and quality assurance by mapping educational delivery to national assessment criteria.

### Key Projects:

- Delivered Portfolio Masterclasses and intensive EPA preparation sessions, leading multiple cohorts to Distinction criteria.
- Managed the logistical lead for a large-scale apprenticeship programme across the Greater Manchester tech ecosystem.

## Catax | IT Manager & Quality Coordinator

2015 – 2017

- Managed IT operations and oversaw the project management for bespoke ERP and Salesforce CRM implementations.
- Established a comprehensive Quality Management System (QMS) and led the successful transition to ISO 9001:2015 accreditation.
- Gathered business requirements and translated them into technical specifications and detailed test cases.
- Developed and executed structured test plans and strategy documents for internal system updates and new feature releases.
- Conducted manual blackbox testing and User Acceptance Testing (UAT) for all internal system updates and new feature releases.
- Performed database testing and verified data integrity using SQL to ensure accurate processing and storage.
- Modernised IT infrastructure and helpdesk processes to strengthen data security and operational scalability.

### Key Projects:

- Led company-wide ISO 9001:2015 certification and the end-to-end implementation of a bespoke ERP and Salesforce CRM integration.

## Education

- **BA (Hons) Philosophy | 1st Class Honours** – Manchester Metropolitan University
- **A-Levels:** Philosophy, Law, Psychology, Critical Thinking – Stoke-on-Trent 6th Form College

## Professional Training & Certifications

- **ISTQB Foundation** (In Progress)
- **AWS Certified AI Practitioner** (In Progress)
- **AWS Certified Cloud Practitioner** (AWS)
- **Quality Management Level 3 Certificate** (CQI)
- **Business Administration Level 2 Certificate** (EDI)
- **Step Into Tech 14-week Bootcamp** (Tech Returners / BBC)