FRASER RACKHAM

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Head of Engineering

615 479





EXPERIENCE

Head of Engineering

Speakers for Schools

- Led engineering teams to drive product delivery, enhance developer outcomes, and
 oversee major changes aligned with the charity's strategic goals, sustaining morale and
 retention through contractor reductions that saved over £600k.
- Resolved structural challenges decisively, such as ending long-running contractor relationships which were no longer meeting charity needs for cost, timeliness and delivery quality.
- Achieved a high-performing engineering operation aligned with DORA/Accelerate research by reducing release frequency (from 2 months to 2 weeks in Q1/2 2024) while sustaining low change failure rate and 99.95% uptime, resulting in cost-per-user reductions and improved user satisfaction (tracked by NPS across user types).
- Regularly attend and act at SLT meetings in any absence of the Technical Director, and member of the Programme Board focusing on business plan execution and product fit, for example providing costed breakdowns and proposing exploratory architectures for optional investments in 25/26 for our main funder.
- Mentored technical leads on process transformation and team leadership, fostering a
 high-performance culture focused on professional growth, operational excellence (e.g.,
 support SLAs, Azure Data Factory, SQL change control), and best practices such as
 more frequent and stable release cycles and feature flagging.
- Worked with high performers to broaden and deepen their roles, while also taking
 other employees through PIPs (performance improvement plans), with significant
 improvements in both cases against goals and retention of the staff involved.
- Sustained quality outcomes during a drop of QA team size from 4 to 1, tracked by external penetration tests, internal bugs and Azure Defender for Cloud security scores.
- Led architectural strategy and defined the technical roadmap, working hands-on with backend and frontend leads to implement event-driven architecture, integrate systems to deprecate unneeded services, such as removing all virtual machines and replacing with SaaS alternatives which removed a significant security threat vector.

Development Manager

Speakers for Schools

= 03/2022 - 04/2023

- Line management of developers, QA and data specialists (and technical leads of areas)
 with attention to professional development, targeted feedback and knowledge
 sharing. Our team had the highest retention rates in the charity over a 3-year period
 while still delivering successfully on our business plan each year.
- Remained an individual contributor and code reviewer, delivering features such as
 landing page dashboards and a C# geographical data API, creating an internal young
 person need score model using ADF and SQL scripts, and integrating with HR systems
 APIs across FE, BE, and Data spaces in the technology team estate. In addition, was
 principal developer for most of our continuous integration and delivery pipelines
 (CI/CD) which contribute to our minimal downtime for users during deployments.
- Collaborated regularly with internal and external stakeholders—including programme
 and product specialists, key technology vendors, consultants, and others (e.g., Azure
 CSP, recruiters)—to present security outcomes to the leadership group and gain buy-in
 for extending pen-test coverage to systems not owned by our team.
- Advocated for and managed end-of-life of a mobile application and handoff from our
 external contractors to internal team ownership of the product, saving the charity on
 the cost of maintenance.
- Provide strategic tooling such as skills gap analysis using a skills matrix, analysis of DORA metrics and departmental KPIs and the facilitation of blameless postmortems (both inside and outside of the department), leading to a focus on areas with single points of failure and targeted capacity planning for quarterly delivery.
- Implemented integration with the Groupcall Xporter API, including an onboarding experience for headteacher signoff, for an MIS trial integration. Planned, led, and monitored a successful trial with several schools, on the back of sustained engagement with the vendor.
- Guided the team through disruptions to morale and psychological safety, particularly while working with contractors based in Ukraine during the early days of the war.

Professional Profile

I'm a proactive software engineering leader and product delivery specialist, with a strong passion for enhancing team dynamics, fostering professional growth, and optimising development processes.

At the core of my approach is DevOps-driven automation and collaboration, enabling streamlined deployments, continuous feedback, and faster, safer software delivery.

I became a software developer after a previous career as a secondary school Data Manager and Senior Leader for non-teaching staff. Solving everyday inefficiencies for time-poor teachers with simple automations inspired me to pursue software engineering full-time.

Since then, I've led efforts to scale delivery, harden system reliability, and reduce operational overhead across engineering teams through smart operational leadership. I love turning 'there has to be a better way' into a beautifully automated solution and replacing friction with flow wherever I can.

This CV only provides a summary of the technologies I've used and of my background in schools and education — please get in touch if you'd like a fuller view of these areas.

Competencies

Technical Direction

Team Management

DevOps & CI/CD

.NET stack (C#)
Automation

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FE Development

Agile Methodologies

KEY ACHIEVEMENTS



Cost-saving Initiatives

Saved over £600k by matching team size to our charity needs.



Improved Release Cycle

Reduced release frequency from 2 months to 2 weeks without increasing the change failure rate.



Enhanced System Stability

Achieved 99.95% uptime, reducing cost per-user and boosting NPS year-on-year.



Flexible Team Player

As both a full stack developer and leader, I regularly pick up the most challenging or uncertain elements of delivery and direction, keeping our team on track and well-respected for keeping our commitments.

EXPERIENCE

Team Lead (Youth Card Mobile App)

Speakers for Schools

= 06/2021 - 02/2022

- Ran a contractor-heavy team to recover and launch a cross-platform mobile app serving discounts and opportunities to young people in state education, delivering on a challenging 6-month timeline from a non-functional, insecure and incomplete app.
- Implemented release management and change control practices, managed technical debt and rearchitected the approach to the existing mobile application to increase delivery speed and quality, allowing a new team to get to grips with this application.
- Surfaced technical debt via 'quality views' (data-driven component views of technical debt and quality challenges), making the internal case for resolving quality issues in outdated APIs and the Xamarin mobile application, rather than solely focusing on feature delivery—ultimately reducing quality issues over time.
- Drove GDPR-compliant design decisions, regular pen testing, and cloud security posture improvements across all environments.

Software Engineer

Speakers for Schools

11/2020 - 05/2021

- Full stack development of legacy application and replacement with a microservicesbased portal.
- Led the full recovery of legacy infrastructure after a significant outage in my first month, demonstrating strong problem-solving abilities and resilience under pressure.
- Played a key role in producing the business case for a complete rebuild of the core work experience portal, which remains in long-term use.

Software Developer

Chess ICT

= 03/2020 - 10/2020

- Full stack development of multiple related legacy and greenfield portals (cloud and onprem), using a mix of challenging, hard-to-change classic ASP applications and more modern, maintainable ASP solutions.
- Billed client work for a Teams chatbot that responded via natural language using Azure
 / Azure Cognitive Services, leveraging existing FAQ content to answer user questions.

Software Engineer

BeyondTrust

= 07/2019 - 03/2020

- Full stack development of existing privileged access management solution using Agile and TDD practices, leading to a global, multi-tenant SaaS iteration of the existing product using Azure, ARM templates, Azure DevOps and bespoke scripting tasks.
- PoC work on an Azure developer portal, triggering deployments using the Azure DevOps REST API to allow orchestration of individual customer instances of releases.
- Full stack development of administration hub for managing cross-system settings for Finance systems using C# APIs, Entity Framework and a SQL backend.
- Responsible for UI (Angular / TypeScript in Visual Studio Code), API/Code (C#), and database (SQL finance systems—mainly insurance policies) across all companies within the group.

Junior Full Stack Developer

Peninsula Business Services

= 10/2018 - 07/2019

Junior Developer

Peninsula Business Services

= 03/2018 - 10/2018

Graduate Developer

Peninsula Business Services

= 09/2017 - 03/2018

- Placed with Salesforce team to lead on a data migration project for an acquisition, a
 migration of 7 million customer records from an undocumented, fragmented SAP
 system to an existing live Salesforce org via SQL Server/SSIS, meeting the challenging
 acquisition compliance deadline.
- Developed a Salesforce logging application used across 3 companies' Salesforce orgs to
 monitor declarative (flow and process) and code system failures (asynchronous and
 synchronous logging), as well as a Salesforce GDPR request handler using a selfdeveloped reflection library in Apex to handle dynamic datasets within restrictive
 Salesforce API limits.
- Raised C# NUnit test coverage from below 10% to above 90% supporting a team wide push on refactoring legacy components and allowing modernisation and removal of outdated services.

TIME AND FOCUS



SKILLS AND TECH

Agile, Angular, Azure (ARM Templates, Azure Active Directory/Entra, Azure Data Factory, Azure Functions, Azure SQL, Azure Web Applications), Azure Devops, C#, CLI, Cypress, E2E testing, Entity Framework, GitHub, Github Actions, Github Copilot, Jasmine, Jenkins, JIRA family (JIRA, Confluence, Compass, JIRA App development), Karma, npm, NUnit, Playwright, Postman, PowerShell, Protractor, React, REST, Salesforce (Development, Flows, Processes), SAP, Selenium, SonarQube/SonarCloud, SOQL, SQL, static analysis, SSIS, TypeScript, Visual Studio, Visual Studio Code, WebDriver, WordPress, YAML

EDUCATION

MSc Informatics (Computer Science)

Kingston University
Distinction

= 2011 - 2013

MA Applied Linguistics

University of Nottingham ## 2004 - 2005

BA English Studies

University of Nottingham # 2001 - 2004

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EXPERIENCE

Data and Assessment Manager

The Barlow RC High School

= 09/2016 - 09/2017

 Completely replaced critical assessment data analysis systems on MIS within first half term to account for lack of existing systems. This allowed all teaching staff to see the achievement of each student, at all times.

Lead School Business Manager

Parliament Hill School

06/2014 - 08/2016

School Performance Data Manager (Concurrent)

Parliament Hill School

= 01/2014 - 08/2016

- During this time, I was a staff governor (liaising with support staff as their representative on the governing body), as well as delivering my own training to governors on RAISEonline, the use of data and data-driven governance, receiving feedback that it was 'the best training on data I've been to'. I also worked alongside the chair on a trial evidencing the NGA's 20 self-evaluation questions.
- Managed MIS for staff and student data and supported wider staff body with data literacy, office skills and training. Legal responsibility for DPA/FOI compliance. Member of senior leadership team reporting to the Headteacher, and line management of Finance, HR, Premises, Admin, Cover and Data functions.
- Responsibility for data management and systems such as Alps, 4Matrix, RAISEonline and SIMS Assessment (MIS), including designing reports such as compliance returns (determining school funding) and responsibility for tracking of KS3-5 student data.
- Collaborated with data managers across the LaSwap 6th form consortium, including supporting on complex cross-school reporting on results day, ensuring that results were delivered accurately and on-time across all 4 schools in the same 24hr timeframe that single schools had.
- Set up and led the Camden Data Manager's forum, sharing updates and technical briefings, as well as supporting other schools with questions on census returns.
- Developed bespoke solutions for generating end of year academic reports and data dashboards per subject area (using self-taught VBA in Excel and Word), reducing time taken for staff analysis from ~2 days to 4 hours per head of department, each year, and ensuring that key groups (such as FSM, G&T, SEND and literacy intervention groups), innovating over and above the initial one-off request.
- Worked on strategic planning, including introducing a risk management heatmap and successful external audits of Finance, HR and Data, as well as an analysis of nonteaching staff roles prior to a restructure and the use of automated reporting tools to reduce workload at all levels of the organisation.
- Outreach acting as a trainer for a local 'requires improvement' school, developing their data management practices, and presented to moderate (50+) audiences on schools' data. I have also presented at the Capita SIMS national partnership conference on using data during a restructure of non-teaching staff.

Director of Data Analysis

Grey Court School

= 10/2012 - 01/2014

- Appointment to the senior management team with wider leadership responsibilities, including creating and tracking a project implementation plan for the introduction of a 6th form and owning the risk register heatmap.
- Development of a dashboard for the leadership group, pushing for data-driven decisions using a scorecard approach and using research from Tufte and Few on data visualization, data-ink and the effective representation of information.
- Measurement of school and national policies, such as the impact of new KS4 accountability measures, on whole school areas ranging from timetabling and curriculum implications to in-year internal assessment.