

## Professional Experience

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### Dye and Durham (London) – Software Engineer

March 2023 – Present

- Led the migration of a legacy SOAP integration to a modern RESTful JSON API built with C#/.NET, improving reliability and maintainability while coordinating with third-party providers through development and deployment.
- Modernised a large-scale monolithic web application by redeveloping core user interfaces using Angular and Angular Material (Material 3), contributing to a shared UI kit and supporting a major framework upgrade from Angular 12 to 18 to improve consistency and long-term maintainability.
- Built a standalone timekeeping frontend microsite using Angular (TypeScript, HTML, CSS), backed by a .NET microservice exposing REST APIs designed documentation-first using OpenAPI, with data persisted in PostgreSQL, and engineered to integrate cleanly into an existing monolithic application.
- Designed and implemented backend microservices using .NET as part of a national property search API, standardising response schemas across jurisdictions and improving data reliability for downstream consumers.
- Contributed to microservice-based and hybrid architectures, working across both greenfield services and legacy monolithic systems within property search and legal practice management domains.
- Built and supported CI/CD pipelines using GitHub Actions, including automated package publishing and mentored peer teams in improving build, test, and release workflows.
- Collaborated closely with product managers, designers, QA engineers, and developers to deliver customer-focused features across frontend and backend systems, balancing technical quality with delivery timelines.
- Worked closely with customer support teams to explain technical issues in clear, non-technical terms, enabling faster issue resolution and better customer communication.

### Robert Bird Group (Brisbane) – Senior Structural Engineer

July 2016 - March 2023

- Developed a desktop application with python for engineers to automate data generation from tower crane structural analysis models, helping reduce time for the team to output presentable data by ~67% and saving the company ~£18,000 / year.
- Developed a plugin with a graphical coding tool that produces tower crane lifting capacity charts and radius plans for engineering drawings. This Automated end-to-end data output process, reducing manual drafting time by 50% and saving ~£25,000 per year.
- Led a team of ~10 engineers and drafters on the construction phases, sequencing and temporary retention works on the Woolloongabba Underground Station on Queensland's largest transport infrastructure project, the £3 billion Cross River Rail development.
- Managed and mentored a team of 5 engineers and drafters on tower crane installation service projects globally.

## Education and Qualifications

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2022	<b>Software Engineering Immersive</b> - General Assembly
2022	<b>Chartered Professional Engineer of Australia</b> (CPEng, MIEAust)
2012 – 2016	<b>The University of Queensland – Bachelor of Engineering (Civil Extended Major) (Hons I)</b> GPA 6.67 out of 7.0, earnings Honors Class I Dean's Commendation for Academic Excellence (GPA of ≥6.67 out of 7)
2007 – 2011	<b>Brisbane Boys College</b> (high school) – <b>Queensland Certificate of Education</b> Graduated in the top 6% of c. 26k graduates (Overall Position OP2) Sportsman of the year, College Prefect, Football Captain and Volleyball Captain in graduating year.

## Technical Skills

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**Languages:** Javascript, Typescript, HTML, CSS, Python, C#, SQL

**Development:** Angular, Angular Material, .NET, OpenAPI, PostgreSQL, SQL Server, GitHub Actions

**Other:** Git, GitHub, Docker, Google Cloud Platform, Azure

## Research Publications

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2017	Conference paper: <b><i>A comparison of perceived and measured visibility in a smoke-filled corridor</i></b> Fire Safety Symposium (IFireSS 2017), January 2017 in Naples, Italy
2016	Conference paper: <b><i>Thermally driven failure mode changes in bonded timber joints.</i></b> World Conference on Timber Engineering, August 2016 in Vienna, Austria

## Other Interests

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Football, Basketball, Beach Volleyball, Golf, Tennis, Snowboarding, Cooking, Travelling