

## Professional Experience

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

March 2023 – Present

- Contributed to the modernisation of Unity, Dye and Durham's flagship Canadian practice management solution, by redeveloping the user interface (UI) using Angular and the Material 3 design system. I co-built a custom UI kit to align with the evolving Material Design system and supported the upgrade from Angular 12 to 18, enhancing UI consistency and long-term maintainability of the monolithic codebase.
- Implemented a full-stack integration for a new payment provider within Unity, utilising Angular on the frontend and Java on the backend, resulting in a seamless in-app payment experience.
- Engineered a .NET-based microservice for Tasmania property searches as part of a National Property Search API, standardising response formats across jurisdictions and improving data reliability for downstream services.
- Mentored a peer development team in creating a CI/CD pipeline for a Salesforce application, reducing manual build and packaging time and improving release reliability.
- Developed and deployed internal GitHub Actions pipelines to automate package publishing to JFrog Artifactory, improving CI/CD efficiency and reducing manual errors.
- Contributed to scalable, microservice-based architecture across Search and Practice Management domains, helping the organization build maintainable codebases.
- Collaborated with cross-functional teams including product managers, designers, and other developers to deliver features across microservices and monolithic applications, with a customer first approach.

### 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 ~\$35,000 / 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 ~\$50,000 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 \$6.3bn Cross River Rail development.
- Managed and mentored a team of 5 engineers and drafters on tower crane installation service projects globally.
- Engineered a bespoke and unique construction sequencing solution for a tower crane to be installed and guy-cabled to the ground in order to decommission and dismantle a 233m transmission tower in Willoughby, Sydney.

## 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) College Prefect, Sportsman of the year, 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, GitHub Actions

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

## 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, Gaming