

Benjamin Wilson

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Professional Summary

As a Mechanical Engineer, I blend problem analysis expertise with a passion for project management. Proficient in working with client relations and improving processes, I'm dedicated to making a lasting impact on technology, sustainability, and engineering excellence. I'm eager to contribute to dynamic, forward-thinking teams and drive positive change in the energy industry.

Career Goal

My career goal as an engineer is to become a leading expert and innovator in the field of renewable energy and sustainable construction. I am committed to driving the transition to a sustainable and clean energy future, where renewable sources such as solar, wind and hydroelectric power can play a pivotal role in meeting the world's energy needs.

Core skills

Project Management- During my time at Windtech Consultants I brought internal teams together to deliver a wind assessment building in Vancouver, Canada. The project was tested for structural wind loading and an environmental wind assessment which had a budget exceeding \$200,000. My management of the lab engineers, CAD team and technician staff resulted in the project being delivered under budget, on time and specific to the client's needs. The firm's satisfaction with the project is underscored by the continuing corporate relationship between the companies.

Working Within a Regulatory Framework- As a Project Engineer for a London-based urban wind project, I had to understand and learn the local regulatory frameworks for conducting wind assessments in the London district. Adapting to a different building code required me to engineer novel solutions that diverged from domestic approaches to wind engineering. This ultimately led to the successful approval of the project by the London building authorities.

Commercialisation – While in Timor-Leste with Engineers Without Borders, I was responsible for developing a sustainable rubbish and waste recycling system. To ensure technical feasibility, I engaged with local community stakeholders to understand the naturally abundant materials available, ensuring the design was commercially viable and could be built at the lowest possible cost without compromising the quality of the engineering design or the system's framework. The design was well-received by local stakeholders and invited for further discussion and development.

Engineering Experience

Career Break Jun 2023 – Feb 2024

- Gap year in Copenhagen, Denmark.

Windtech Consultants– Project Engineer Feb 2022 – June 2023

- Created engineering solutions for clients within the bounds of the Australian Building Code as well as international building regulations for overseas clients.
- Used Terrain Analysis GIS Software to map terrain and land properties, analysing wind impacts on surrounding environments and mapping land topography.
- Liaised over the phone and email with local and international clients to ensure project details, such as updated drawings and building features, were kept relevant to the project.
- Managed multiple clients concurrently, delegating tasks to relevant internal teams to ensure projects ran efficiently and met delivery deadlines.
- Extracted relevant technical data from wind tunnel testing and presented findings to non-technical clients to demonstrate impacts and solutions for their projects.

Heliguy.tv- Engineering Intern May 2021 – Oct 2021

- For my Engineering thesis I developed a vibration isolation system for the cinema drone used in the filming of Marvels' 'Thor: Love and Thunder' - I was also awarded a High Distinction mark.
- Assessed and identified mechanical problems within a system using onboard drone sensors to retrieve relevant information and solve engineering issues.
- Paid great attention to detail when designing engineering drawings with SolidWorks, ensuring they were manufactured to tight tolerances.
- Liaised with external manufacturers to ensure the accurate and safe procurement of designed parts.
- Made decisions based on data-driven indicators, leading to the effective design and manufacturing of parts.

Clarence Engineering Consultants- Undergraduate Engineer Intern June 2018 – Dec 2018

- Generated AutoCAD documents for HVAC systems used in the large-scale production and implementation of the Shoreline retirement village in Coffs Harbour.
- Conducted on-site investigations to validate systems and communicated with relevant tradespeople to address any issues that arose during construction.
- Attended stakeholder meetings to ensure the project was delivered on time and under budget.

Timor-Leste with 'Engineers Without Borders' July 2018

- I was awarded a scholarship from the university to attend an Engineers Without Borders summit, which enabled me to visit and learn from rural communities in Timor-Leste.
- This experience advanced my understanding of cultural awareness in sustainable design and highlighted its importance for rural communities.
- I designed an engineering system utilising local resources in Timor-Leste and presented it to community stakeholders and NGOs in the region.

Education

University of Technology Sydney 2017 - 2022

Bachelor of Mechanical Engineering (Honours) with Diploma of Professional Practice

- Engineering Honours CAPSTONE – High Distinction

NSW High School Certificate

- Received a graduation award- "mature approach to studies, striving for personal excellence and positive attitude".

Professional References

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ePortfolio

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