# Leon Tran

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#### **OBJEXTIVE**

Mechanical Engineer with a strong passion for robotics engineering and mechanical design seeking opportunities. Eager to apply practical skills in a dynamic and innovative environment that contributes to the future of the automation industry.

#### **SKILLS & INTERESTS**

- Technical Skills: 3D/2D Modelling, Prototyping, Development and Testing, Microcontrollers
- Software: SOLIDWORKS, AutoCAD, FEA Software, MATLAB, C/C++, Altium, Arduino, MS Office, Simulink
- Interest: Mechanical Engineering, Electronics Engineering, Automation Engineering

#### **EDUCATION**

**University of Wollongong** Bachelor's Degree in Mechatronic, Engineering (Honours)

*Sept 2017 – November 2022* 

- Organizations/Awards: Tri-semester Scholarship 50% (Diploma of Engineering), UOW STEM Hackathon 2019 (Second Prize)
- **Relevant Coursework:** Mechanical Systems Design | Robotics and Automation | Electrical and Electronic Systems | Control Systems Engineering | Engineering Mathematics | Digital Signal Processing | Materials Science

## WORKING EXPERIENCES

### **Ebro Armaturen Pacific Ptv Ltd**

Mechanical Project Engineering

September 2023 – Current

- Collaborated closely with cross-functional teams to transform concepts into detailed engineering drawings using CAD softwares.
- Incorporating Australian Standard AS1100 to uphold the quality of designs and comply with industry regulations.
- Managed multiple projects concurrently, while consistently delivering on time and within budget.
- Conducted comprehensive risk assessments, effectively implemented control measures, and played a pivotal role in developing detailed product technical specifications, contributing to the overall success of the projects.

## **Transdev Sydney Ferries**

Engineering Intern

March 2022 – November 2022

- Designed and modeled mechanical components using AutoCAD for efficient water storage and distribution in river-class vessels, integrating mechanical and electronic elements.
- Collaborated with the asset management team to enhance maintenance processes for a large vehicle fleet.
- Conducted data analysis using FEA software to optimize asset performance and reduce costs while assisting in implementing a CMMS for precise asset tracking and maintenance.

## **i**Accelerate

Engineering Intern

December 2020 – February 2021

Conducted market analysis, utilized LEAN Methodology to generate business ideas, and presented a Minimum Viable Product.

## **PROJECTS**

## **Automated System Design for Self-driving Tram**

University of Wollongong, NSW

ECTE350 - Engineering Design and Management 3

March 2020 – November 2020

- Designed object-avoiding algorithms for the tram prototype using **C++ code structures** on the **Arduino** platform, implementing the code to the ultrasonic sensor and performing **soldering** to install and assemble the prototype.
- Utilized **SOLIDWORKS** to plan out the position of the large electronic components and construct a tram body to house the electronics.
- Contributed to soldering circuitry components on Veroboard and created wiring diagram for automated entrance.
- Analyzed cash flow and calculated budget using MS Excel to contribute to the proposal report.

Project Showcase: https://youtu.be/z5XDm6wrk8E

#### **No-till Farming System Design**

University of Wollongong, NSW

MECH311 – Mechanical Engineering Design

August 2020 – November 2020

- Designed and created 3D prototypes of the 'DISC OPENER' system using Autodesk Inventor, iterating for optimal performance.
- Applied mechanical principles and analysis techniques to develop a 'DISC OPENER' system integrated into a No-till Farming system.
- Collaborated with a team to design a No-till farming system, managing documentation, and ensuring high-quality design.