LUIS PRATAMA

+61 420 XXX XXX [Email] Sydney, New South Wales

Recruitment Team

Industrus Engineering Pty Ltd [Company Mobile] [Company Email] [Company Address]

Dear Hiring Manager,

I am writing to express my interest in the Graduate Mechatronics Engineer position at Industrus Engineering. As a final year Mechatronics Engineering student at the University of Technology Sydney, I am excited about the opportunity to contribute to your innovative engineering projects and develop professionally through your graduate program.

A commitment to ethical conduct and the highest standards of professional accountability (3.1)

During my studies, I encountered a major challenge when I failed a core subject due to overcommitting to other coursework. I took full responsibility for the result, re-enrolled the next semester, and made significant changes to how I managed my time and workload. My efforts led to a distinction grade. This experience taught me to remain accountable even in difficult situations and reinforced my belief that ethical conduct includes owning outcomes and learning from setbacks.

Demonstrated ability to effectively communicate both with other engineers and with stakeholders from different fields (3.2)

While interning at Optik Consultancy, I worked on a microalgae bioreactor project that required explaining technical concepts to a client with a non engineering background. To ensure clear communication, I adjusted my language and used diagrams to support my explanations. This approach helped maintain strong client alignment throughout the prototyping process and strengthened my ability to collaborate across disciplines.

The ability to engage with a creative, innovative and proactive environment (3.3)

In one of our design challenges at Optik, we struggled with unstable power distribution using Arduino boards. I proactively researched alternatives and proposed switching to the ESP32, which resolved the issue while enabling wireless functionality. For waterproofing, I also suggested using a flexible silicone grommet instead of a hard casing, improving reliability in varying conditions. These solutions were implemented and contributed to the success of the prototype.

Demonstrated ability to use and manage information (3.4)

In Robotics Studio 2, my role focused on developing a vision system that allowed a robotic arm to sort six types of bottles based on their caps. I gathered real time image data, tuned detection parameters, and integrated perception outputs with motion control modules. Managing and applying this information effectively was key to ensuring smooth system performance and achieving the full pick and place cycle with consistency.

The ability to manage your own performance in a professional environment (3.5)

Balancing part time hospitality work and academic responsibilities has required me to be disciplined and proactive in managing my time. Working in unfamiliar venues with short setup times taught me to stay calm under pressure, prioritise tasks, and coordinate efficiently with team members. This has translated into how I handle university deadlines and project timelines with professionalism.

A demonstrated ability to work as part of a team and to show leadership when required (3.6)

In both Robotics Studio 2 and the Artificial Intelligence in Robotics subject, I collaborated with peers to develop technical systems from scratch. Our AI project involving a YOLO based detection and sorting system was selected for UTS TechFest, showcasing our teamwork and innovation. Throughout these projects, I contributed actively, delegated tasks fairly, and supported team decisions, helping to foster a strong, high performing group environment.

I believe that my hands on engineering experience, problem solving mindset, and commitment to growth make me a strong fit for the Industrus Engineering Graduate Program. I am particularly excited by the opportunity to rotate through project areas, collaborate with leading engineers, and contribute to impactful infrastructure initiatives.

Thank you for considering my application. I have attached my resume and would welcome the chance to discuss how I can contribute to Industrus Engineering's mission.

Kind regards,

Luis Pratama