LUIS PRATAMA

+61 420 767 008 | LinkedIn | ruishuluis@yahoo.com |

PROFILE

Final-year Mechatronics Engineering (Honours) student with practical internship experience in mechanical systems design and prototyping. Specializing in mechanical building design using SolidWorks, with additional experience in automation, system integration, and technical documentation. Strong understanding of engineering principles, backed by hands-on project work and collaboration in multidisciplinary teams. Committed to delivering precise, efficient design solutions and pursuing continuous improvement as a future Project Engineer.

ENGINEERING EXPERIENCE

Optik Consultancy / Byron Bay Technology   *May 2024 – Aug 2024*
Engineering Intern

- Designed and developed a functional nozzle housing for Byron Bay Technology, enabling multidirectional movement and auto shut off
- Modelled the mechanism in SolidWorks with attention to tolerances, alignment, and precise fit
- Integrated servo motors and Arduino to automate nozzle control and shut-off operation
- Collaborated with engineers on prototyping, testing, and mechanical-electrical system integration
- Gained hands-on experience in embedded systems, motion control, and design for manufacturing
- Tools & Skills: SolidWorks, Arduino, Servo Motors, Mechanical Design, Embedded Systems, DFM, Prototyping

CASUAL EXPERIENCE

Super Agent Agency   *May 2022 - Present*
Hospitality Staff

- Provide professional front-of-house support at high-profile hospitality events, ensuring smooth guest experiences and efficient service delivery
- Work collaboratively in dynamic team environments to coordinate event setup, food and beverage service, and breakdown
- Maintain high standards of presentation, communication, and time management across diverse event settings
- Adapt quickly to fast-paced and high-pressure situations, supporting events leads and client needs flexibility and reliability
- Developed strong interpersonal, multitasking, and customer service skills applicable across client-facing and team-based roles
- Skills: Communication, Teamwork, Time Management, Client Service, Adaptability, Event Coordination

MilkMe Barista   *May 2023 - Present*
Barista

- Prepare and serve high-quality coffee and espresso beverages in a fast-paced mobile café environment across various Sydney events
- Operate commercial espresso machines with consistency and attention to detail.
- Maintain cleanliness, stock levels, and setup of mobile coffee stations in line with food safety and hygiene standards
- Deliver friendly and efficient service while managing high customer volume during peak hours
- Skills: Customer Service, Espresso Preparation, Time Management, Food Safety, Teamwork

RELATED PROJECT

Robotics Studio 2   *Feb 2025 – May 2025*
UR3e Bottle Sorting Cobot – Perception System

- Built a ROS 2 node to capture and process RealSense camera images for color-based bottle-cap detection
- Created an OpenCV GUI with live sliders and click-to-sample tools for on-the-fly threshold tuning
- Designed a simple and adjustable interface to test color detection quickly and accurately
- Contributed to translating visual data into a format that the robot could understand for precise sorting
- Ensured the system worked smoothly under different lighting and ran in real time
- Worked closely with team members responsible for robot motion and gripper to ensure everything worked together

Artificial Intelligence in Robotics   *Feb 2025 – May 2025*
SortBot Simulation - YOLO

- Built a PyBullet simulation of a uArm robot sorting colored boxes using AI-powered vision and motion planning.
- Collected and labeled 1,000+ top-down images to train a real-time object detector, achieving over 95% box-identification accuracy in simulation
- Helped test how well the robot could detect and pick up boxes under different conditions
- Improved how the system responded by mapping camera and robot positions accurately
- Presented progress regularly to peers and incorporated feedback from supervisors

TECHNICAL SKILLS

Language C/C++, Java, Phyton, Arduino
Systems Macintosh, Linux (Ubuntu), Microsoft Windows
Software Microsoft Office, AutoCAD, SolidWorks, Visual Code, MATLAB

CORE SKILLS

Teamwork
- Collaborated effectively with a multidisciplinary team of five engineers to successfully develop and deliver a client-focused project.

Problem Solving
- Contributed to solution brainstorming for a sorting system during internship, with the proposed concept later developed into a prototype showcased in a client demo.

Communication
- Demonstrated strong communication skills by effectively coordinating with both the client and team members, contributing to a smooth workflow and successful project delivery.

Multitasking
- Effectively managed multiple academic deadlines while maintaining part-time employment, demonstrating strong time management and personal responsibility.

Language
- English (IELTS – 7)
- Bahasa Indonesia (Native)

EDUCATION

Bachelor of Engineering in Mechatronics (Honours)   *Feb 2022 – Dec 2025*
- University of Technology Sydney (UTS)   *(expected)*

Diploma of Engineering   *Mar 2021 – Dec 2021*
- University of Technology Sydney College

CERTIFICATIONS
- Responsible Service of Alcohol (RSA)
- Class C Driver's License

REFEREES

Available on request.