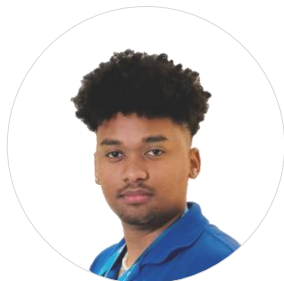


Jordan Thuo

Undergraduate Student – Mechatronics Engineering and Physics



Years of Industry Experience

- 4 Years as an undergraduate

Qualifications and Memberships

- Cert III Hospitality
- Engineers Australia

Key Skills and Competencies

- I am motivated, ambitious, and hardworking.
- I maintain a well-organised and analytical approach.
- I am often described as an “Out of the box thinker”.
- I have years of experience in leadership positions and networking.
- Very quick learner and can quickly adapt in any work environment.

Professional History

- 2021 – 2024 | City of Moreton Bay Undergraduate Engineer, Asset Maintenance & System Innovation
- 2021 - 2022 | Spark Engineering Camp Operations Manager, Logistics.

Referees

Name: Ben Wallace

Role: Team Leader

Organisation: City of Moreton Bay

T: 0427 833 779 **E:**

ben.wallace@moretonbay.qld.gov.au

Name: Tim Fraser

Role: Chief Executive Officer

Organisation: Youth Without Borders

T: 0498 236 764 **E:** tfraser02@gmail.com

Name: Karl Somoray

Role: Simulation Engineer

Organisation: Hatch

E: karl.somoray@missionary.org

Professional Overview

With a distinguished academic pedigree from the Queensland University of Technology, I stand out not merely as a 4th year undergraduate but as a beacon of dedication, innovation, and unparalleled excellence. Being recognised as a Dean’s Scholar and maintaining an enviable GPA above 6.73 is a testament to my persistent pursuit of academic and professional excellence.

My engineering portfolio highlights my desire to create. From conceptualising an autonomous polar orientated crane to designing a self-driving car and creating a strategic Chess AI, each project is a testament to my ability to seamlessly merge theoretical acumen with real-world applications, consistently pushing the envelope of engineering possibilities.

At the City of Moreton Bay, I didn’t just occupy a role; I transformed it. Harnessing the power of Machine Learning and Computer Vision, I spearheaded initiatives that set new benchmarks in data analytics and system processes. My approach to problem-solving is holistic; I don’t just address challenges, I pre-empt them, ensuring that every project I undertake is not only efficient but also future-ready.

As the Opportunities Coordinator for the Electrical Engineering Student Society (EESS), I’ve bridged the gap between academia and industry, creating platforms for knowledge exchange and fostering invaluable industry connections. My leadership as the Operations Manager with Spark Engineering Camp goes beyond technical mentorship; it’s about inspiring the next generation of innovators and breaking down barriers for students from non-traditional backgrounds.

My track record is clear. I bring passion, expertise, and a relentless drive to every endeavour. I am not just looking for a job; I am seeking an opportunity to make a difference, to bring value, and to be a catalyst for change. If you’re looking for someone who will not only meet expectations but consistently exceed them, then let’s talk.

Key Skills and Accomplishments

1. **Academic Excellence:** Recognised as a QUT Dean’s Scholar a GPA above 6.7 and recipient of the QUT Academic Excellence Scholarship.
2. **Strategic Problem Solving:** Demonstrated a multifaceted approach to engineering challenges, from the design phase to stakeholder collaboration, ensuring projects are both innovative and feasible.
3. **Team Collaboration:** Successfully collaborated with multidisciplinary teams, showcasing the ability to communicate complex technical concepts effectively and drive projects to completion.
4. **Continuous Learning & Adaptability:** Proven track record of quickly adapting to new challenges, technologies, and environments, ensuring that projects remain at the cutting edge of engineering innovation.

In a world where innovation drives progress, I am on a mission to be at its forefront. My journey, marked by groundbreaking projects and academic excellence, has been more than just about mastering engineering and science; it’s been about redefining its potential to shape a better world. I am seeking a role where my passion for engineering converges with a commitment to sustainability, allowing me to contribute to solutions that are not only innovative but also contribute to a better tomorrow for people and the planet. To potential employers: If you’re in pursuit of someone who doesn’t just meet standards but sets them, and someone who believes that the best way to predict the future is to create it, then I am your candidate.

Jordan Thuo

Undergraduate Student – Mechatronics Engineering and Physics

Education

Queensland University of Technology – Bachelor of Science and Engineering (Honours)

Engineering Major – Mechatronics, Robotics, and Automation Engineering

- I want to learn to develop innovative and sustainable solutions that impact the real world.
- Combine technical skills within mechanical, electrical and software engineering to gain a broad range of skills that can be integrated into a future career in mechatronics, robotics, and automation.

Science Major – Physics

- I enjoy physics and how it gives me a richer understanding into the fundamentals of our universe and future challenges facing our world.
- I want to share my vision for a more sustainable future and tackle new opportunities.

Achievements

- QUT Deans Scholar; 2022
- Dean's List for Excellent Academic Performance; 2024, 2023, 2022, 2021
- Senior College DUX; 2020
- Gold Honour Award for High Achievement; 2017-2020
- Subject Awards: Math Methods, Math Specialists, Design, Physics; 2020
- Math/Science Student of the year; 2020
- Service to leadership award; 2020
- Contribution to Community Award; 2019
- Advanced Mathematics Award; 2018

Current GPA – 6.72

Scholarships

- QUT Academic Excellence Scholarship

Diploma, Brisbane Bayside State College – Year 7 to Year 12, Graduated 2020

Key Subject Areas

- Math Specialists, Math Methods, Chemistry, Physics, Design, English

Key Recognition

- Senior College Captain

Licenses and Certificates

- Cert III in Hospitality – Year 2018
- First Aid – Issued Jun 22, Exp Jun 25
- Open Drivers Licence – Issued Nov 2021

Work Experience

The City of Moreton Bay | Undergraduate Engineer – Asset Maintenance, Technical Operations & Innovations | 2021 – 2024

The exhilarating journey of collaborating with the Asset Management and Technical Operations teams at The City of Moreton Bay has fortified my prowess to propel engineering projects toward heights of unparalleled efficiency. Receiving the opportunity to experiment with Artificial Intelligence and Image Capture to enhance data analytics, reporting, and system processes, these experiences have woven a tapestry of tenacity in my skill set. Problem-solving, attention to detail, and the ability to work effectively within multidisciplinary teams; this is where I thrive, where challenges fuel my fire, and where I'm primed to ignite your organisation's projects with the same fervour and finesse.

Key Contributions:

- Engagement and consultation with various internal stakeholders, management, and operations personnel to assist in identifying and implementing process improvements.
- Performing data analysis, and asset performance metrics to identify trends and opportunities for improvement in asset maintenance and creating dashboard visualisations used to inform and strategise decisions.
- Participation in innovative projects machine learning and artificial intelligence technologies, to improve asset maintenance procedures and systems.

Jordan Thuo

Undergraduate Student – Mechatronics Engineering and Physics

Youth Without Borders | Operations Manager – Spark Engineering Camp | 2021 – 2022

Appointed as the Operations Manager for the Youth Without Borders initiative (Spark Engineering Camp), I've discovered that true impact extends far beyond engineering equations. It's about weaving the threads of change into the fabric of communities. As I contribute my time and energy to initiatives that resonate with my values, I find myself not just involved but intertwined with the tapestry of making a difference. It's about lending a helping hand, a listening ear, and an unwavering commitment to creating a world where possibilities know no bounds. With each moment invested, I reaffirm my belief that the future we shape is not singular but shared, a collective symphony of efforts that create ripples of change far beyond the present.

Key Contributions:

- Oversaw and managed all aspects of Spark Engineering Camp, including planning, scheduling, and executing various activities and workshops, demonstrating strong project management skills.
- Collaborated with sponsors, community partners, and educational institutions, fostering strong relationships and building networks to support the camp's objectives.
- Organised logistics for the camp, including facility arrangements, transportation, and equipment procurement, ensuring smooth and efficient operations throughout the event.
- Addressed challenges and resolved issues that arose during the camp, employing critical thinking and innovative solutions to ensure a seamless experience for camp participants and staff.

Electrical Engineering Student Society (EESS) | Opportunities Coordinator | 2021 – 2022

Navigating the role as the Opportunities Coordinator for EESS, I've honed seamless coordination and organisation skills through orchestrating impactful industry events. More than just events, I've woven a web of connections with industry luminaries, amplifying the realm of opportunities for my peers. This role isn't just about logistics; it's a canvas on which I've painted my leadership prowess, a testament to my unwavering passion for igniting innovation and nurturing professional growth within the heart of the engineering community.

Key Contributions:

- Communicated with students, faculty, alumni, and professionals to develop partnerships with various industry stakeholders and provide exciting opportunities for students.
- Collected data and researched various materials to gather information through verbal and written inquiry, and evaluated and/or prepared presentations, newsletters, and social media posts.
- Coordinated assigned volunteer programs and/or site tours. As well as coordinated and implemented volunteer-led activities in collaboration with management across all levels of the institution.
- First contact for all inquiries regarding programs involving WIL (Work Integrated Learning), university, work-study, and vocational job training opportunities.
- Collaborated with colleagues to plan, host, and facilitate industry-related events and project opportunities.

The Coffee Club | Food & Beverage Attendant | 2017 – 2021

Key Contributions:

- Possessed strong interpersonal skills resulting in outstanding communication, teamwork, flexibility, and cohesiveness with fellow co-workers.
- Maintained poise and focus under pressure allowing for efficient, high-quality service.
- Protected business, team members and customers by monitoring health, safety and Covid-19 restrictions and keeping operations within food safety guidelines.

Clinton Takeaway | Kitchen Hand | 2015 – 2017

Key Contributions:

- Set and enforced performance and service standards to keep consistent, high-quality environment devoted to customer satisfaction.
- Continuously working in a fast-paced environment, multitasking and prioritising tasks to maximise efficiency and customer satisfaction.

Jordan Thuo

Undergraduate Student – Mechatronics Engineering and Physics

Project Experience

[Autonomous Polar Orientated Crane \[Link\]](#)

Description: A model lifting device designed to move an object from a lower pedestal to a higher one, inspired by the Ferris Wheel mechanics using circular motion and polar coordinates.

Specific role and achievements:

- Evaluated and selected the Ferris Wheel inspired Polar Crane design.
- Played a pivotal role in CAD designs, laser cutting, and assembly of the base.
- Conducted thorough testing and adjustments to ensure the crane met all design criteria, including weight, safety, and efficiency.

[Autonomous Mobile Pick-n-Pack Warehouse Robot \[Link\]](#)

Description: A prototype autonomous robot designed for efficient item retrieval and delivery within a warehouse setting, integrating advanced computer vision and navigation systems to autonomously locate, pick, and deliver items to designated packing stations.

Specific role and achievements:

- Spearheaded the design and development of the robot's computer vision system, implementing HSV-based colour segmentation and multithreading to enable real-time object detection and spatial estimation on an embedded system.
- Utilized a Raspberry Pi 3 and OpenCV libraries, and 3D-printed a modular mount for the camera, ensuring optimal processing efficiency and flexibility in various warehouse conditions.
- Successfully demonstrated the robot's capabilities in a mock warehouse environment, highlighting its potential for scalability in large-scale warehouse automation.

[Quadrupedal Walking Robot \[Link\]](#)

Description: A robot designed to walk stably and efficiently using a functional geared motor system and 4-bar linkages.

Specific role and achievements:

- Designed linkages and conducted calculations to ensure the robot's ability to walk straight for 2 meters in under 30 seconds.
- Played a key role in the fabrication process, addressing and resolving various design and functional challenges.
- Utilised software tools like AutoCAD and SolidWorks for modelling and laser cutting components.

[Autonomous Self-Driving Car \[Link\]](#)

Description: A small vehicle designed to navigate and follow a line, using IR sensors, algorithms, and control systems to perceive its environment and move safely around corners and adjust its speed in response to external cues.

Specific role and achievements:

- As the Scrum Master, I orchestrated team coordination, ensuring streamlined communication, methodical sprint planning, and adherence to agile methodologies.
- Contributed significantly to the optimisation of the PID control and motor functionality, offering technical expertise in iterative debugging and performance evaluation.
- Fostered a culture of open communication and strategic problem-solving, positioning the team to excel in delivering a top-tier line-following robot for the culminating demonstration.

[Vertical Take-off and Landing Aircraft \[Link\]](#)

Description: A simulated aircraft designed to simulate the dynamics of the Harrier Jump Jet, focusing on vertical take-off and landing capabilities.

Specific role and achievements:

- Designed and implemented a control system to regulate the aircraft's movement on a 2D plane, including horizontal and vertical axes.
- Utilised advanced control theory and dynamic modelling in MATLAB and Simulink to optimise the aircraft's performance within simulations and made adjustments to ensure stable flight and landing operations.

Jordan Thuo

Undergraduate Student – Mechatronics Engineering and Physics

A step towards Leadership

In 2020 I was elected senior college captain at BBSC. My role as a leader within the school community has given me many unique opportunities to collaborate with other school leaders, community representatives and the local leadership in parliament to discuss ideas and work on improvements in sustainability and issues affecting the community. I believe I was an excellent fit for this position in school leadership because of my passion for sustainability and my attitude towards innovation and taking initiative.

Something I am really proud of is my involvement in Spark Engineering Camp and several student societies within my university culture. I explain my roles and step towards leadership in these positions further in my extra-curriculars section, however I believe my involvement in these opportunities has impacted me and made me a better person.

Computer & Software Skills

- I have experience and training in various online applications and data management, these include (but not limited to):
- Microsoft Office 365 Suite; (Excel, Word, PowerPoint, Projects)
- Microsoft Power Bi & Report Builder
- Microsoft SQL Server Management Studio
- Autodesk applications; (AutoCAD, Inventor, Eagle & SolidWorks)
- MATLAB/Simulink
- TechnologyOne
- ArcGIS Pro
- Visual Studio (Most confident in C, C#, SQL, Assembly or Python – happy to learn more)

Extra-Curricular Activities

QUT Deans Scholars and College of Excellence

I am a QUT Deans Scholar and Academic Scholarship Recipient. I am also a part of a supportive community of high performing students which provides access to unique professional development activities, exclusive opportunities, and events such as sponsorship to conferences and leadership camps. Through College of Excellence I have gained a better understanding of myself and what it means to be a leader. Being a Deans Scholar allows me to enhance my university experience through a variety of opportunities, and workshops tailored to assist with professional development of transferrable skills, increase global outlook, and connect with many like-minded peers. It is through my dedication and hard-work that I have opportunities like these.

Youth Without Borders – Spark Engineering Camp

Spark Engineering Camp is one of the greatest experiences of my life. The Youth Without Borders project, Spark Engineering Camp, aims to provide underprivileged, indigenous, rural, and low socioeconomic high school students with experiences to grow and discover STEM (Science, Technology, Engineering and Mathematics) pathways, as well as meet like-minded individuals. We hope to show all our students that pursuing tertiary education is a real possibility.

My journey within Spark began in 2019 as a student on the camp. In 2021, I took on the responsibility as a student mentor and the Operations Manager for the camp. My role as a staff member requires me to work within a committed team of volunteers to help inspire high school students from non-traditional backgrounds and encourage them to pursue further education. Anyone who knows me knows that I can talk about Spark for hours. I have never experienced anything more wholesome, and to come back as a 'staffie' I have never experienced anything as rewarding and fulfilling.

Australian Navy Cadets TS Gladstone

For two years I improved my confidence, leadership capabilities and my level of assertiveness through navy cadets. Throughout my career with cadets, I have made a significant development in character, involving myself with camps and working in large teams. This helped me become a valuable contributor in a teamwork environment, as well as being disciplined and making smart decisions. This, combined with my experience as a food and beverage attendant at various restaurants and cafes, allows me to incorporate the skills I have learned into my schooling and employment.

Basketball

In 2018, I participated in an interschool basketball tournament in which our team placed first within the district. This allowed us to play in the 2020 CBSQ state championship for basketball where our team placed 11th in our division. It required a tremendous amount of teamwork, communication, and dedication, and being able to build on each other's strengths and weaknesses. All of which are skills I hope to transfer into your workplace. Now I like to play casually outside of work and university. Would love to start up a social team with the co-workers if that's a possibility.

Jordan Thuo

Undergraduate Student – Mechatronics Engineering and Physics

Volunteering

Volunteering is an integral part of what I enjoy especially giving back to the community. From 2015-2017 I volunteered at the local church as an assistant, entertaining and assisting with the supervision of the younger children and as a role model for them in this capacity. I educated the younger children about God and strengthened their beliefs, as well as guiding them in morals for life. I would also use this opportunity to engage them in learning our church songs, so they feel included in the church community and provided technical support for the digital presentations.

Also starting 2021, I joined The QUT Big Lift, a local non-for-profit organisation that aims to develop meaningful relationships with Indigenous communities through community service. Our main goal is to benefit rural communities and promote awareness for people in need by completing service projects each year

Clubs and Societies

Throughout my university journey, I have actively engaged in numerous clubs and societies to expand my knowledge, skills, and network within the university community. Notably, I am a dedicated member of the following organisations, each offering unique experiences and opportunities for personal and professional growth:

- QUT Dean's Scholars
- College of Excellence (CoE)
- Electrical engineering student society (EESS)
- Spark Engineering Camp – Youth Without Borders (YWB)
- Medical Radio imagery social club (MedRad)
- QUT Mathematics society
- QUT Physics society
- QUT Robotics Club
- QUT Motorsports

These involvements in clubs and societies have broadened my horizons, allowing me to connect with peers who share similar interests and ambitions. By actively participating in a diverse range of events and networking opportunities, I have cultivated valuable relationships and continuously expanded my knowledge beyond the classroom.

The Person Behind the Piece of Paper

Beyond the achievements and experiences outlined on paper, I am an individual driven by both influence and steadiness, as reflected in my DISC profile of 'IS'. This means I naturally gravitate towards building strong, meaningful relationships, often serving as a bridge between teams and individuals. My influential side thrives on collaboration and open communication, allowing me to inspire and motivate those around me. On the other hand, my steady nature ensures that I approach tasks with consistency, reliability, and a deep sense of commitment. I value harmony and am adept at creating a positive, cohesive work environment. While my resume provides a snapshot of my professional journey, my 'IS' profile sheds light on the interpersonal skills and personal qualities I bring to the table. It's this unique blend of influence and steadiness that shapes my approach to challenges, teamwork, and leadership.

