SADMAN ARAFAT

Carrum, VIC, Australia | |

arafatsadman@live.com | www.sadmanarafat.com | linkedin.com/in/arafatsadman

PROFESSIONAL SUMMARY

Recent graduate with a Bachelor's Degree in Electrical and Computer Systems Engineering (Honours) from Monash University, with a minor in Sustainable Engineering. Passionate about leveraging analytical skills, technical expertise, and hands-on project experience in electrical systems, renewable energy, and embedded technologies. Proven leadership in student organizations and team projects, with strong communication and problem-solving abilities. Seeking a graduate engineering role to contribute to innovative solutions and sustainable technologies.

EDUCATION

Bachelor of Engineering (Honours)

Major: Electrical and Computer Systems Engineering

Minor: Sustainable Engineering

Monash University, Clayton, VIC, Australia

• Scholarship: Engineering International Undergrad Excellence Scholarship

Relevant Courses: Digital Systems, Electrical Circuits, Computer Systems, Signals and Systems, Advanced Engineering Mathematics, Probability Models in Engineering

TECHNICAL SKILLS

Programming Languages: Python, MATLAB, C, C++

Software & Tools: MATLAB, Simulink, LabVIEW, SPICE, AutoCAD, PCB Design Tools

Hardware: Embedded Systems, Microcontrollers (Arduino, Raspberry Pi), FPGA, Circuit Design, Signal Processing

• Other: Project Management, Data Analysis, Renewable Energy Systems

PROFESSIONAL EXPERIENCE

Electorate Officer Australian Parliament House

Melbourne, VIC, Australia | 2025 - Present

Graduated: 11 December 2024

- Provided administrative and constituent support for a culturally and linguistically diverse electorate, ensuring inclusive communication practices.
- Coordinated diversity, equity, and inclusion (DEI) initiatives, working closely with local organizations to develop community outreach programs.
- Assisted in policy research, event coordination, and stakeholder engagement, focusing on equitable resource allocation.
- Facilitated dialogues and workshops to promote civic participation among underrepresented groups, strengthening community ties.

Floor Manager Melissa Oakleigh

Oakleigh, VIC, Australia | 2021 - Present

- Created and maintained staff rosters for a team of 25+, proactively handling last-minute changes or staffing shortages.
- Recruited, trained, and onboarded new employees to foster a cohesive team environment.
- Utilized data-tracking spreadsheets to allocate resources more efficiently, aligning with analytical methodologies used in engineering.
- Liaised with clients to organize events, address inquiries, and resolve any concerns.

LEADERSHIP & INVOLVEMENT

Monash Student Association (MSA) General Representative, Student Affairs Committee | 2021 International Student Representative | 2022

Bangladesh Student Association of Monash University (BSAMU) Vice President | 2023 - Present Secretary | 2022 Assistant Secretary | 2021

Monash Engineering Teams

- Management Lead, Monash Boring Excavating Student Team | 2023 2024
- Marketing Manager, Monash Deep Neuron
- Operations/Business & Media, Monash Nova Rover
- Business & Marketing Coordinator, Monash Solar Decathlon Team
- Design Lead & Officer, TEDxMonashUniversity
- Communication Representative, Monash Environmental Engineering Society

PROJECTS

Tennis Ball Collecting Robot

Developed an autonomous robotic system capable of identifying, collecting, and depositing tennis balls in a designated area using a YOLO-based vision system.

Integrated sensors, actuators, and mechanical components to optimize performance, achieving over 90% accuracy in object detection.

- Led navigation algorithm development and system integration, enhancing real-time object tracking, obstacle avoidance, and reliability.
- Contributed to sustainable design with cost-effective components and modular architecture, meeting IEEE Std 1573-2021 compliance.

Assessment Overload! - Research Project on Academic Workload

- Conducted research on assessment overload in Monash University's Faculty of Engineering, analyzing data from 187 student surveys and 8 faculty interviews.
- Developed a Python-based visualization tool to identify assessment clustering, providing actionable insights to improve academic workload distribution. The assessment tool influenced curriculum changes benefiting over 500 engineering students.
- Proposed strategic recommendations, including reducing exam weight, promoting projectbased learning, and enhancing assessment scheduling practices.
- Presented findings to stakeholders, contributing to ongoing discussions on curriculum reform and student well-being.

ADDITIONAL INFORMATION

Languages: English, Bengali

Victorian Driver's License | Personal Commute

References: Available upon request