Ariff Muhammed Ahsan Husain

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ABOUT

Motivated and curious computer engineering student with a strong interest in software development and emerging technologies. Passionate about problem-solving and eager to learn about cloud computing, AI applications, and agile methodologies. A proactive team player with a keen desire to grow through hands-on experience in a dynamic and collaborative environment.

EDUCATION

National University of Singapore **Aug 2024 – Present**
Bachelor of Engineering in Computer Engineering, Honours *Singapore*

- **CGPA: 4.63/5.0, Minor in Data Analytics**
- Relevant Courses Completed: Engineering Principles and Practices, Data Structures and Algorithms
- Expected Date of Graduation: May 2028

WORK EXPERIENCE

Floral Horizon (Career Contact) **Nov 2020 – Dec 2020**
UX/UI Designer *Singapore*

- Gained foundational knowledge in UX/UI Design through mentorship from industry professionals
- Enhanced Instagram page of SME Floral Horizon, driving improved brand presence and engagement by 200%
- Redesigned the webpage of Bengawan Solo for a final project presentation through a no-code environment

PROJECTS

Pawgress – Personal Task Manager with Virtual Pet Companion **Jan 2025**
Developed during NUS HacknRoll 2025 *Singapore*

- Integrated task management with a virtual pet to enhance user engagement and productivity
- Utilized Vite for fast bundling and development, ensuring high performance
- Leveraged React and Tailwind CSS for a responsive and dynamic user interface, ensuring an enjoyable user experience
- Built the backend using SQLite for effective data storage and management

Autonomous Maze Navigation with mBot **Sep 2024 – Nov 2024**
CG1111A Project *Singapore*

- Designed and implemented an autonomous mBot for maze navigation as part of CG1111A, integrating Arduino programming, circuit design, and advanced algorithms
- Integrated sensors, including a color sensor for path detection, IR and ultrasonic sensors for precise positioning, and obstacle avoidance
- Developed PID control logic for wall tracking and dynamic steering, ensuring smooth and accurate navigation
- Implemented a k-nearest neighbors (k-NN) algorithm to enhance color sensor capabilities, enabling efficient pattern recognition and optimized path selection

AWARDS

NUS Hack&Roll Hackathon (2025): Quacker's Commendation Top 15 Award for Innovation

SKILLS

- **Languages:** English (Proficient), Tamil (Native)
- **Programming:** C, C++, Python (Framework(s): Flask)
- **Database Management:** SQL, PostgreSQL
- **Other Skills:** Time Management, Critical Thinking, UX/UI Design (Figma, Canva)