# Muhammad Aliff Ashraff

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## WORK EXPERIENCES

**Telekom Malaysia**                                                                                              **Rawang, Selangor**
*Network Maintenance and Operation Executive*                                                   *June 2021 – Present*
- Supervises end line distribution from exchange towers to customer premises, ensuring efficient and timely service delivery.
- Coordinates teams to address customer requests promptly, identifying issues before assigning tasks to the technicians in charge.
- Performs regular inspections and quality checks of work done by TM contractors at customer sites, ensuring adherence to standards and customer satisfaction.
- Conducts in-depth research on Optical Network Units (ONUs) to identify recurring issues, developing and implementing strategies to reduce failure rates and improve network reliability.
- Actively engages with customers to address their concerns and issues, enhancing overall customer experience and satisfaction.
- Monitors network performance metrics, identifying areas for improvement and implementing corrective actions to maintain optimal service levels.

**Coherent**                                                                                                                      **Ipoh, Perak**
*Test Engineer*                                                                                         *November 2020 – May 2021*
- Managed Longwave Production Testers and performed preventive maintenance to ensure optimal performance and longevity.
- Led a testers relocation project, coordinating with cross-functional teams to complete the task efficiently and on schedule.
- Conducted detailed data processing and failure analysis, delivering weekly yield reports to production and management.
- Updated test plans for various testing processes, ensuring alignment with quality standards, and monitored Statistical Process Control (SPC) to maintain process integrity.
- Initiated and managed a project aimed at reducing product rejects by conducting experiments and analyzing data from new tester hotplates to identify and implement improvements.

**Mias Global**                                                                                                          **Rawang, Selangor**
*Engineering Intern*                                                                                 *June 2019 – August 2019*
- Took part in the wire trunking process for Press Automation Transfer Robots, ensuring efficient setup.
- Interpreted ladder logic diagrams to guide precise panel wiring for the control panels.
- Played a key role in disassembling and assembling sealant pumps during maintenance, following mechanical drawings to ensure precise and effective servicing.

## EDUCATION

**Universiti Putra Malaysia**                                                                                **Serdang, Selangor**
*Master of Software Engineering (CGPA: 4.0)*                                               *September 2022 - Present*
- **Honors/Awards:** ICICSE 2023 Best Paper Award
- **Relevant Courses:** UX Design, Software, Software development methodologies, Software Testing, Web Engineering, Software Models, Artificial Intelligence

**Universiti Malaysia Pahang**                                                                                **Pekan, Pahang**
*Bachelor of Electronics Engineering (CGPA: 3.72)*                                        *August 2016 – September 2020*
- **Honors/Awards:** Anugerah Konvokesyen Ijazah 2020, Dean's List Award for 7 semesters (2016 – 2020), Best Presenter for Integrated Engineering Design 2019, The Essence of Excellent 2017
- **Relevant Courses:** Computer Programming, Microcontroller, Microprocessor, Multimedia Technology, Communication System, Embedded Controller, Computer Vision

## RELEVANT PROJECTS

**X (Twitter) Clone** | *React.js, MongoDB, Node.js, Express, Tailwind, React Query, Cloudinary*                *July 2024*
*App URL: https://twitter-clone-l2ip.onrender.com*
- Developed full stack X web app that include post creation, deletion, commenting, liking, and following/unfollowing users.
- Secure user authentication (login and registration) with JSON Web Tokens (JWT).
- Able to edit profile information, including cover and profile images, with image uploads managed by Cloudinary.
- Utilized React Query for efficient data fetching and caching.
- Implemented real-time notifications for user activities.

**Food Delivery Web App** | *React.js, Node.js, Express, MongoDB, Stripe*                                            *May 2024*
*Admin Panel URL: https://food-delivery-admin-gexh.onrender.com*
*App URL: https://food-delivery-frontend-kht6.onrender.com*
- Developed a full-featured food ordering website using the MERN stack, including frontend, backend, and admin panel.
- Admin panel is for food item management, order status updates, and order tracking.
- Implemented JWT-based user authentication for secure login and registration.
- Developed shopping cart and checkout functionality with Stripe payment integration.
- Utilized Multer for image handling and ensured a responsive, user-friendly design.

**Sport Facility Booking System |** *Figma, BASIC UX Framework*
*Design URL: sport-booking-system-prototype* *August 2023*
- Conducted research in evaluating user experience of the prototype booking system that was designed using Figma.
- Improved user experience for UPM Sport Facilities and Equipment Booking System using the BASIC UX Framework.
- Applied Design Thinking Method to guide the project and ensure an intuitive design.
- Conducted UX testing with the BASIC UX Framework checklist and User Experience Questionnaire (UEQ).
- Won Best Paper Award for 6th International Conference on Interdisciplinary Computer Science and Engineering 2023.

**Physical Intruder Detection System |** *IoT, Wi-Fi Fingerprinting, Sensor Fusion* *Ongoing*
- Developing a multi-sensor intruder detection system to enhance the physical security of certain closed space by integrating Wi-Fi fingerprinting with several sensors (motion, infrared).
- Utilizing sensor fusion techniques (Bayesian rule, weighted fusion) to enhance detection accuracy and reduce false alarms.
- Implementing a real-time monitoring system to detect physical intrusions and generate alerts or automated responses.
- Evaluate system performance through experiments, to demonstrate the improvements over traditional single-sensor methods.

**Amazon Clone |** *HTML, CSS, JavaScript* *March 2024*
*App URL: https://amazon-clone-9m8m.onrender.com*
- Developed a frontend-only clone of Amazon using HTML, CSS, and JavaScript.
- Focused on creating a responsive and interactive user interface.
- Implemented features including product listings, search functionality, and shopping cart for managing and reviewing items.
- Order history feature to view past purchases and order tracking feature are included to give best user experience.

**Pocketalk Landing Page |** *HTML, CSS* *February 2023*
*App URL: https://pocketalk-landing-page.onrender.com*
- Developed a product landing page using only HTML and CSS, focusing solely on frontend design.
- Designed to showcase the Pocketalk product with a visually appealing and informative layout.
- Emphasized clean, responsive design to enhance user engagement and effectively present the product's features.

**Control of a Two-Tank Liquid Level System |** *Figma, BASIC UX Framework* *August 2020*
- Conducted research on controllers to manage liquid levels in a tank system by Using Integral Sliding Mode Control (ISMC).
- Designed control algorithms for Conventional SMC, Boundary Layer SMC, and ISMC.
- Evaluated ISMC performance in terms of chattering using MATLAB and Simulink.

**Heat Detection System |** *C, Linux Ubuntu, Eclipse, ThingSpeak, BeagleBone Black* *August 2017*
- Configured Ubuntu on BeagleBone Black (BBB) and established internet connectivity.
- Developed a heat detection system using BBB, including integration with GPS for location data and SMS for communication.
- Implemented data transfer to Thingspeak for real-time monitoring and analysis.
- Performed data collection and analysis with various sensors (temperature, humidity, audio, current.) and implemented signal conditioning and conversion techniques to ensure accurate readings.

## CURRICULAR ACTIVITIES
- Basketball Competition, Karnival Sukan Ansara 2023 (July 2023)
- Career Virtual Run (March 2019), Crazy Run 3.0 (October 2018) and Pahang Engineer's Run (April 2018)
- Member of Persatuan Seni Silat Cekak Malaysia (2018)
- Basketball Competition, Sukan Fakulti (March 2017)
- Tennis Competition (March 2016)
- National Oil Rig Competition (February 2014)

## TECHNICAL SKILLS
**Programming Languages:** JavaScript, HTML, CSS, C, MATLAB
**Frameworks/Libraries:** React, Node.js, Express, Tailwind CSS, React Query
**Database:** MongoDB
**Developer Tools:** VS Code, Git, GitHub, Figma
**Other Tools:** Microsoft Office (Word, Excel, PowerPoint), Canva, JMP, Proteus, Simulink, Arduino

## REFEREES
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