ALI ZAHID

Selangor, Kuala Lumpur, Malaysia | ali_zahid2002@outlook.com | +60189718976 | GitHub | LinkedIn

EDUCATION

ASIA PACIFIC UNIVERSITY (BCE + MEng) Kuala Lumpur, Malaysia
Bachelor of Computer Engineering – CGPA: 3.84 December 2024

- Dual Degree with De Montfort University UK
- APU Merit Scholarship Awardee - 20% Scholarship
- Malaysia Board of Engineer Certified

Relevant Coursework: Software Development, IT Infrastructure, Networking, Database Management, Cloud Technologies

ASIA PACIFIC UNIVERSITY` Kuala Lumpur, Malaysia
Foundation in Engineering – CGPA: 3.94 December 2020

- APU Merit Scholarship Awardee - 10% Scholarship

SKILLS

Programming & Development: Java, C/C++, Python, SQL, Assembly, JavaScript, Verilog, VHDL, HTML5, CSS6, PHP, SQL
Circuit Design: Analog Integrated Circuit Design, Digital Circuit Design, SPICE Simulation
Databases: MySQL, RDS, Google Appscript
Software: Confluence, Figma, LTSpice, LabVIEW, MATLAB&Simulink, Multisim, Zapier, RapidMiner, Quartus Prime, SOLIDWORKS, NodeRed, Mosquitto MQTT
Frameworks/Libraries: Familiarity AngularJS, ReactJS, PyTorch, StatsModels, TensorFlow
DevOps & Operations: Git, Docker, Windows, Linus, Unix
Cloud Technologies: AWS, Azure, GCP (Google Cloud Platform), IaaS, Paas and SaaS Concepts
Certifications: Microsoft Azure Fundamentals, CCNA

WORK EXPERIENCE

DYODD SDN BHD Kuala Lumpur, Malaysia
IT Support Intern September 2023 - January 2024

- Established new coding standards and conventions for team members.
- Designed an HR system in JavaScript leveraging Google's ecosystem and automation tools, integrating deeply with Jira and WhatsApp for real-time updates. ***System implemented using Google Appscript.***
- Implemented an automated security reporting system for residential startups, enhancing guard efficiency and reducing reporting errors. ***System designed in Appscript, Google Form used for data collection, Google Sheets used as database.***
- Introduced new backup procedures across all company projects using GitHub.
- Developed an automated system converting security reports from various systems into formatted PDFs, integrating text and video content. ***Zapier used to automate the conversion process across all systems, Google Appscript used to design the conversion programs hosted on Google cloud.***
- Designed multiple quality-of-life programs that significantly reduced completion times for tedious tasks.

RELEVANT PROJECTS

SOLAR-POWERED PREDICTIVE ENERGY HARVESTING IOT DEVICE [FINAL YEAR PROJECT]

- Designed a Solar-Powered Weather data collection device on an ESP microcontroller that predicts future weather conditions via a SARIMAX model based on meteorological parameters and Solar Panel performance.
- Utilized to estimate future energy to be harvested.
- Device operations are automatically adjusted to maintain device operations.
- LoRA and MQTT is used for data transmission/collection, while NodeRed is used as the foundation for the system.

MULTI-STAGE OPERATIONAL AMPLIFIER

- Designed a multi-stage CMOS operational amplifier utilizing different circuit topologies in order to drive ultra-low level resistive and capacitive loads in parallel.
- Circuit was designed entirely in LTSpice, and utilized a Basic Differential Amplifier and PMOS Common Source Stage as main gain-boosting methods
- Was able to achieve design objectives of driving a 30Ohms and 5pF parallel load under specified design constraints

AWS-HOSTED CAFÉ ORDERING WEBSITE

- Developed and hosted a dynamic website using PHP, HTML, and CSS on AWS, utilizing private/public subnets, a bastion server for secure access, Cloud9 for configuration, RDS for database management, Elastic Load Scalers for load balancing, and availability zones for increased reliability.

VISION-BASED RESISTOR IDENTIFICATION

- Designed a python application utilizing PyTorch and NumPy to develop both manual and TensorFlow based visual identification of various kinds of resistors. This system can calculate the resistance values via the color bands, highlighting different kinds of physical defects present in the resistor and calculate the total size and volume of the resistor capsules

DIGITAL CAR PARKING SYSTEM

- A digital car parking system was created using VHDL in Quartus, employing state machine concepts for efficient program execution. It includes authentication features to permit only authorized vehicles entry and prevent unauthorized access.

PHARMACY MANAGEMENT SYSTEM

- Created a Pharmacy management system in C++ to monitor and manage stock of medicines in a pharmacy.
- Users could register accounts, purchase medicines, and receive automatic receipts.
- The system also updates medicine stock levels automatically after each purchase.

ONLINE SHOPPING WEBSITE DESIGN

- Designed an online shopping website in Figma based on user feedback gathered through various data collection methods.
- Internal discussions and market research on competitors were conducted to create a user-friendly and functional design.

HOSTEL APPLIANCE SERVICE PROGRAM

- Created a Hostel Home Appliance Service Program in Java (OOP).
- Users could request appliance repairs, which registered technicians could view and fulfill.
- The program recorded all requests, repairs, and payments for record-keeping purposes.

HOTEL ROOM BOOKING SYSTEM

- Developed a hotel reservation system in C-language enabling users to book rooms based on their requirements.
- The system includes robust error correction to prevent duplicate bookings or invalid data inputs.
- Users have individual accounts to view their saved receipts and booking history within the system.

LEADERSHIP AND ACTIVITIES

GOOGLE APPSHEET HACKATHON (2023) *Organized by APU, Awantech Systems and Google Malaysia.*

- As one of 36 teams, participated in workshops, mentor sessions, and networking events to enhance skills in no-code tool development. Developed an APU Consulting App enabling students to schedule consultations with specific lecturers seamlessly.
- The app automatically assigns time slots based on uploaded schedules, requiring no confirmation from lecturers.
- Achieved recognition as a finalist just outside the top 10, receiving a digital certification for participation.

MSRI REFUGEE TEACHING PROGRAM (2020)

- Taught a group of young school children some basic mathematical concepts.
- Interacted and communicated to help boost their confidence and ensure they had a good time.
- Communicated with other volunteers to ensure proper delivery of class as well as meals throughout the day.