



MUHD NAZUR SYAHMI

HARDWARE ENGINEER

Address

B1-01-09, BLOCK 1
PANGSAPURI SELANGORKU @
DANAU RIA BANDAR GAMUDA
GARDENS, 48050 RAWANG,
SELANGOR, MALAYSIA

Phone

014-9466234

Email

nazur.syahmi@gmail.com

CURRICULUM VITAE (CV)

OBJECTIVE

Seeking a challenging role in electronics, automation, and engineering, where I can apply my 5 years of experience to develop cutting-edge solutions in IoT and embedded systems. Passionate about contributing to Industrial Revolution 4.0 (IR4.0) innovations, I aim to enhance my technical skills and build a long-term career in the engineering and technology sector.

EDUCATION & QUALIFICATIONS

2015 – 2018

Bachelor of Engineering (Hons) Electronic Engineering
Universiti Teknologi Mara (UiTM) Shah Alam

Project :

Gait Analysis System

Description :

Developed gait analysis systems to assist clinicians in identifying abnormalities and asymmetries in gait to provide a window to study disease by analysing the walking pattern of the patients.

2012 – 2015

Diploma in Electrical Engineering (Electronic)
Universiti Teknologi Mara (UiTM) Pulau Pinang

Project :

Programmable Op-amp Learning Kit

Description :

Developed a programmable learning kit that enables students to have more understanding in simple ways on the basic concept and the expected outcome from various Op-amp features.

2010 – 2012

Sijil Pelajaran Malaysia (SPM)
Sekolah Menengah Teknik Kuala Selangor

WORK EXPERIENCE

2022 - PRESENT

Company : Progressive Impact Corporation Berhad (PICORP)

Position : Electronic Hardware Developer

Key Responsibilities :

- ✓ Electronic Circuit Design & PCB Development
 - Designed and developed electronic circuits from Proof of Concept (POC) to prototype.
 - Created schematic diagrams, board routing, generated Gerber files, and developed Bill of Materials (BOM) for PCB production.
 - Designed and fabricated electronic boards for product applications
- ✓ Product Testing & Troubleshooting
 - Developed product test plans and conducted end-to-end hardware testing.
 - Troubleshoot product defects and resolved functionality issues before application deployment.
- ✓ Embedded Coding & Software Development
 - Developed firmware for embedded systems using Arduino, Raspberry Pi, NodeMCU, Beaglebone, and other microcontrollers.
 - Designed, implemented, and tested back-end programming for data storage and analytics.
 - Developed front-end software for IoT applications.
- ✓ Technical Documentation & Compliance
 - Authored and maintained technical documentation for hardware and software development.
 - Reviewed and approved software-related documentation.
 - Ensured compliance with industry standards and best practices.

Technologies & Tools Used :

- ✓ PCB Design Software: EasyEDA, Autodesk EAGLE, KiCad
- ✓ Microcontroller Platforms: Arduino, Raspberry Pi, NodeMCU, Beaglebone
- ✓ IoT Protocols: MQTT, HTTP, XMPP, CoAP, WebSocket
- ✓ IoT Network Protocols: LoRa, NB-IoT, WiFi, Bluetooth, ZigBee, Z-Wave

Key Achievements :

- ✓ Successfully developed and deployed multiple IoT-based embedded systems for industrial applications.
- ✓ Optimized hardware designs for efficiency, cost-effectiveness, and performance.

WORK EXPERIENCE

2021 - 2022

Company : Allied Hori Sdn Bhd

Position : R&D Engineer

Key Responsibilities :

- ✓ Research & Development
 - Participated in planning, executing, and monitoring experiments to test new concepts and enhance existing products.
 - Conducted market research and evaluated similar products to improve functionality and cost-efficiency.
 - Developed new product designs based on customer needs, material requirements, and manufacturing constraints.
- ✓ Product Design & Engineering
 - Created detailed design specifications, schematics, and PCB layouts.
 - Redesigned existing products to enhance performance, durability, and cost-effectiveness.
 - Prepared and presented product designs to management and stakeholders.
- ✓ Prototyping, Testing & Validation
 - Developed and tested prototype products for functionality, ease of use, and longevity.
 - Conducted in-depth data analysis to ensure compliance with customer expectations and legal standards.
 - Designed hardware testing plans and troubleshooting strategies to ensure high-quality production.
- ✓ Cross-Functional Collaboration & Manufacturing
 - Communicated with business development, manufacturing, and quality control teams to align project goals.
 - Ensured smooth production processes by providing necessary input and technical guidance.
 - Oversaw the production process to ensure design compliance and manufacturing feasibility.

Key Achievements :

- ✓ Enhanced product testing methodologies, reducing failure rates by 30% by converting from manual to semi-automatic.

WORK EXPERIENCE

2019 – 2021

Company : Bluberry Networks Sdn Bhd

Position : Application Engineer

Key Responsibilities :

- ✓ System Development & Integration
 - Provided technical direction in system development, integration, and testing.
 - Designed and developed hardware components, including circuit boards, processors, and embedded systems.
 - Ensured seamless system integration and conducted rigorous hardware validation.
- ✓ Hardware & PCB Design
 - Designed hardware solutions based on Raspberry Pi, Arduino, and ESP8266.
 - Created PCB layouts, ensuring compliance with EMC guidelines and industry standards.
 - Developed technical drawings and electrical system specifications exceeding company standards.
- ✓ Prototyping & Testing
 - Designed and developed prototypes for mechatronics devices, including motors and sensors.
 - Conducted testing, debugging, and validation of hardware designs.
 - Documented test results and submitted reports to clients and management.
- ✓ Manufacturing & Supply Chain Coordination
 - Coordinated with component suppliers and machine shops to ensure availability of components for production.
 - Oversaw installation and debugging of actuators in robotics applications.
- ✓ Compliance & Regulatory Knowledge
 - Ensured designs met applicable laws, codes, and industry regulations.
 - Proficient in computer applications related to hardware and system design.
 - Knowledgeable in mechanical equipment, including robotics and production machinery.

WORK EXPERIENCE

2018 – 2019

Company : Myinvent Technologies Sdn Bhd

Position : Support Engineer

Job Scope :

- ✓ **Embedded Systems & IoT Development**
 - Designed and developed various Arduino-based projects integrating sensors, actuators, and LoRa communication technology.
 - Developed IoT Gateway platforms, including requirement analysis, feasibility studies, architecture design, hardware implementation, testing, and debugging.
 - Implemented low-power design strategies for battery-powered IoT devices
- ✓ **Hardware & PCB Design**
 - Designed circuit boards and processors, ensuring compliance with EMC guidelines.
 - Specialized in ESP8266 and ATmega328P microcontroller design, with strong troubleshooting capabilities.
 - Developed digital and analog circuit designs for various applications.
- ✓ **Prototyping & Research**
 - Contributed to early concept development and technology innovation, collaborating with cross-functional teams.
 - Researched new material-generation techniques and compiled technical reports for the engineering team.
 - Created, tested, and optimized IoT prototypes using C/C++.
- ✓ **System Implementation & Optimization**
 - Independently specified, developed, and implemented new technologies for IoT applications.
 - Focused on power-efficient designs to enhance device longevity.
 - Ensured high-quality system integration through rigorous testing and debugging.

SKILLS

Technical Skills

- ✓ Hardware Development
- ✓ EasyEDA
- ✓ C / C++ Programming
- ✓ Visual Code Studio
- ✓ MIT App Inventor
- ✓ Proteus
- ✓ LT Spice
- ✓ Technical Support
- ✓ Google Suites
- ✓ Project Management
- ✓ Documentation
- ✓ Microsoft Office

Non-Technical Skills

Communication Skills

- ✓ Able to Work Independently.
- ✓ Able to Work Under Pressure.
- ✓ Willingness to Learn.
- ✓ Written.
- ✓ Teamwork.
- ✓ Presentation.

Leadership Skills

- ✓ Problem Solving.
- ✓ Responsibility.
- ✓ Discussing and Negotiating Ideas.
- ✓ Trustworthiness.
- ✓ Planning, Organizing.

CERTIFICATES & AWARDS

- ✓ Recognized as a Professional Technologist by MBOT
- ✓ Certificate in PCB Design & IoT Programming
- ✓ Certificate in Mastering RS485 Network Communication
- ✓ Certificate in Mastering Modbus TCP/IP Network Communication
- ✓ Certificate in Eagle PCB Design

REFERENCES

En Fadzli Ghazali

CEO – Bluberry Networks SB
012-3889904

En Ariffin Zulkifli

IoT Trainer – Myinvent Technologies SB
017-7875232

Mr Sivaletchumayah Sivalingam

Talent Management – Allied Hori SB
016-6464579