JOB DESCRIPTION

Position Title	**Research Officer (Wireless Communication & Sensor Technology)**

A. Position Purpose & Summary:
• Research concepts and methods to solve a given task • Support design and development of control electronics for electric motorcycle energy management system consisting of Supercapacitor, Lithium Battery, Motor Controller, BLDC motor, communication and sensor interfaces • Participate in the complete product development cycle, from initial product specification to product release • Support product prototype builds and debug prototypes • Interface with hardware engineer and cross-functional team • Develop and debug real-time firmware in C/C++ • To develop, test and optimize prototypes towards a functional outcome • To contribute to the documentation of all development work • To contribute in research/scientific paper submission to journal/publication

B. **Primary Duties & Responsibilities:**
Prepare proposals for feasibility, development and/or verification of provided sub-tasks
Code, test and debug embedded software modules as per SRD (Software Requirement Document)
Design, Prototype, Test, Optimize software/hardware solutions as per design specifications
Participate in code, schematic & PCB design review
Documentation – source codes, test plan & report, bug tracking, release notes, etc.

C. Accountability:
To refer to Level of Authority as per MIMOS Policy.

POSITION REQUIREMENTS

D. Academic Qualification:

■ Phd ■ Master's ■ Degree Others (Please specify)

■ Engineering ☐ Information Technology ☐ Science ☐ Marketing / Business

☐ Finance / Management ☐ Others (Please specify) Human Resource

E. Experiences:

■ Fresh ■ 1- 3 years ■ 5-10 years ☐ More than 10 years

■ R&D ☐ Information Technology ☐ Manufacturing ☐ Oil & Gas

☐ Finance / Admin ☐ Sales / Marketing ☐ Others (Pls specify)

F. Technical Skills	G. Soft Skills
C/C++	Analytical thinking
Experience in real-time embedded software/firmware development for e.g. communication devices/ automotive applications/ industrial automation/ consumer products	Problem solving
Experience with developing for multiple architectures e.g. ARM, PowerPC, x86_64	Good command of verbal and written English, Bahasa Melayu
Good foundation knowledge of microprocessors and controller design	Time management
Knowledge of test equipment such as oscilloscope, logic analyzer & signal/function generator	Team player
Able to read and comprehend electronic schematics with a fair understanding of analog and digital circuitry	Good interpersonal skill

Additional Preferences

- Experience in board level (PCBA) troubleshooting and embedded system debugging
- Experience with dSPACE Microautobox will be added advantage
- Knowledge in MATLAB and Simulink simulation software
- Ability to understand and extend code written by others
- Knowledge in Electric Vehicle and familiarity with automotive communication protocols (PWM, LIN, CAN) and their design implications

Related Job Match

At least a Master's / Bachelor's Degree in Electrical / Electronic / Telecommunications / Computer Engineering or Computer Science