JOB DESCRIPTION

Position Title	Research Officer

A. Position Purpose & Summary:

- Research concepts and methods to solve a given task
- Develop algorithms for POC/Proto use
- To arbitrate a set of solutions to arrive at best-fit for a given problem
- To implement programming sub-tasks w.r.t SDLC policies
- To model mechanically a given model/sub-model using CAD tools
- To fine-tune model in accordance with manufacturing technology & tolerances
- To assemble component solutions SW/FW/HW for a given POC/prototype
- To develop, test and optimize POCs & prototypes towards a functional outcome
- To contribute to the documentation of ALL POC/Prototype models
- To participate in various review sessions primarily as a reviewee

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 API/SRS (Software Requirement Specifications)

- Design, Prototype & Test software/hardware/mechanical solutions as per design specifications

- Participate in code, CAD, schematic & PCB design review

- Documentation – source codes, test plan & report, bug tracking, release notes, CAD models, etc.

- Software/Hardware maintenance i.e. bug fixes, module-based enhancements

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++/Python Programming	Analytical thinking
Embedded Development - bare metal, Arduino, FreeRTOS, etc	Problem solving
Experience with microcontroller architecture and peripherals	Good command of verbal and written English, Bahasa Melayu
Familiar with 3D CAD (Fusion 360, Solidworks)	Time management
Familiar with PCB CAD (Kicad, Eagle)	Team player
Experience with motors (DC, BLDC) and Drives (Servo, H-Bridge, Inverters)	Good interpersonal skill

Additional Preferences

- Knowledge of electronic circuits and components with ability to read schematics and datasheets
- Board troubleshooting with logic analyzer, oscilloscope, microprocessor debugger, protocol analyzer
- Familiarity with Internet of Things (IoT) system
- Ability to understand and extend code written by others
- Ability to quickly prototype new concepts and ideas
- Familiar with SDLC concepts and methods
- Experience with manufacturing technology (3D printing)
- Experience in mobile apps development such as Android, IOS
- Experience in Windows application development using Python/C++/QT

Related Job Match

Degree or Masters in Mechatronics Engineering