

KHAIRUL HIJRAN BIN ALIAS

PT 5801, Taman Desa Barakah
17500, Tanah Merah
Kelantan Darul Naim
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Last Update: 1 January 2018

EDUCATION BACKGROUND

Bachelor (Hons) of Microelectronics Engineering University Malaysia Perlis (UniMAP), Arau, Perlis Indera Kayangan CGPA: 2.52	2013 until 2017
Penang Matriculation College (KMPP) Physical Science (Module II), Kepala Batas, Pulau Pinang CGPA: 2.60	2011 until 2013
Sekolah Menengah Kebangsaan Kemahang Science Stream Felda Kemahang 2, Tanah Merah, Kelantan Darul Naim Grade: 4A, 4C, 1D	2005 until 2010

SKILLS & QUALIFICATIONS

- **Engineering Skills:**
Microelectronic fabrication, Electronic communication, and computer engineering skills, able to work wafer fabrication and test department, Experience in wiring and soldering, troubleshoot electronic devices using Multimeter and Oscilloscope, Metrohm Autolab machine, Experience on Failure analysis lab and experiment in clean room at UniMAP.

Fabrication Lab & Failure Analysis Lab Equipment:
 - Cleanroom: Oxidation, Deposition, Diffusion, Photolithography, Wet Cleaning, etch process, Wet and Dry Oxidation Furnace, PVD, Photoresist spinner, Hot Plate, exposure system etching, High power microscope, Spectrometer, Scanning Electron Microscopy(SEM), and Visual Inspection.
 - Failure Analysis Lab: Visual Inspection, Decapsulation, Cross sectioning, I-V Characteristic, Wire bonding process, High power microscope, Grinder and polishing, Curve tracer, Wire bond tester, Handling Thermosonic Compression Wire Bonder and Atomic Force Microscopy(AFM).
- **Software and Computer Skills:**
Skilled in IC Designing using IC station Via Microwind, Mentor graphics Modelsim Software, Microsoft Office (Word & Excel), programming languages (assembly and C), simulation (Nova1.11, Scilab, Altera Quartus II, ANSYS Workbench), and editing using Adobe Photoshop and Gimp.
- **Personal Strength:**
Good analytical and initiative as well as creative thinking, Self-independent, love to learn new thing and fast learner, self-motivate and flexible person, good in group and self-work, able to work extensive hours if required, willing to travel and work hard, ambitious, try to find a solution to solve a problem, and have a driving license (B2 & D).

COURSE HIGHLIGHTS

Fundamental Of Microelectronic Fabrication, Analogue Electronics, Digital Electronics Principles, Programming Language, Signal & System Analysis, Electromagnetic Theory, Semiconductor Fundamental, Introduction To Microprocessor Design, Computer Architecture & Organization, Microelectromechanical System, Control System Engineering, Power Electronics, Principles Of Materials Engineering, Digital Integrated Circuit Design, Communication Engineering, Advanced Devices, Microelectronic Fabrication, Introduction To IC Design & Microprocessor Design, Basic Electrical Machine, Electronic Devices, Nano electronic Engineering, Optoelectronic Engineering, Instrumentation, Semiconductor Packaging, Reliability & Failure Analysis.

INTERNSHIP

SFP TECHNOLOGY SDN.BHD

27 June - 4 Sept 2016

Bukit Minyak, Pulau Pinang

CNC Milling, Production Department

- Learn to operating the CNC Milling machine via Mastercam Software.
- Identify type of drill/cutter tools to perform a certain operation metal milling based on drawing by customer.

WORK HISTORY

Social Researcher

22 June 2017-15 July 2017

UNIVERSITI MALAYSIA PERLIS (UniMAP), Arau, Perlis

- Collecting data for the politics sentiment and social-economics in Kedah.

Production Operator

10 August 2017-31 December 2017

JCY HDD TECHNOLOGY SDN.BHD (P2), Bukit Minyak. Pulau Pinang

- Inspection of HDD actuator arm height via All-In-One Tester software.
- Support the production lines to achieve the manufacturing goals.

LANGUAGES

- Bilingual: Malay/English
- Communication Skills: Written and Verbal

SEMINAR AND EXTRACURRICULAR ACTIVITIES

- Involved community program organized by UniMAP.
- Involved Sukan Antara Pusat Pengajian by UniMAP.
- Involved Piala Dekan Mikroelektronik by PPKME.
- Involved Kejohanan Sepak Takraw by Kelab Takraw UniMAP.
- Involved Bengkel Elektrik/Elektronik (Green Day) by USM.
- Involved Program Induksi Perdana PERSADA by Felda.
- Involved Sukan Kolej Kediaman KKTAG by KKTAG.
- Involved Kem Bomba Dan Penyelamat by Bomba UniMAP.
- Involved Program Transformasi Generasi Baru Felda by Felda.
- Member, Kelab Bomba & Penyelamat, UniMAP.
- Member, Kelab Sepak Takraw, UniMAP.
- Member, Persatuan Mahasiswa/Mahasiswi Felda (PERSADA), UniMAP.
- Registered as Graduate Engineer in Board of Engineer Malaysia(BEM).

FINAL YEAR PROJECT (FYP)

Thesis Title: Study on Uric Acid Sensor based on Gold Nanoparticles (AuNPs)-Multiwalled Carbon Nanotubes (MWCNTs) Hybrid.

- Investigate the performance of the nanomaterials to improve the sensitivity of Uric Acid sensor for detection of Uric Acid serum level in human blood to diagnose certain disease such as Gout, Sclerosis and etc. in medical field using Metrohm Autolab (PGSTAT204) Via NOVA 1.11 software.

EXPECTED SALARY

- Around RM 2000 and above.

REFERENCES

1. Name: Dr. Shahrir Rizal Bin Kasjoo
Position: Academic Advisor
Phone No: 019-3345851
Company: School of Microelectronic Engineering
University Malaysia Perlis (UniMAP)
2. Name: Dr. Razaidi Bin Hassan
Position: Student Development & Alumni
Phone No: 019-4464645
Company: School of Microelectronic Engineering
University Malaysia Perlis (UniMAP)