

# AHMAD IRFAAN QAWIEM BIN DICKSON AHMAD ZAIDI



SL 173, Lorong Samarindah 17, Taman Samarindah Fasa 2, 94300 Kota Samarahan,  
Sarawak

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## Education

### Sijil Pelajaran Malaysia (SPM)

2006-2010

Sekolah Menengah Kebangsaan (SMK) Spaoh  
SPM Result: 2A+, 3A, 1A- and 3B

### Foundation of Science in Physics

2011-2012

Universiti Malaysia Sarawak (UNIMAS)  
CGPA: 3.16

### Bachelor of Engineering with Honours:

### Mechanical and Manufacturing Engineering

2012-2016

Universiti Malaysia Sarawak (UNIMAS)  
CGPA: 3.25

### Interest

- Interest in engineering design and creating machine mechanism.
- Quality control of a production.
- Computational fluid dynamics simulation.
- Special interest in material engineering and manufacturing technology research.
- Research of ergonomic and biomechanical systems.
- Contamination control.

## Skills

### Computer Skills

- Good computer technology literacy.
- CAD Software:** SolidWorks, AutoCAD (Level: Intermediate)
- CFD Software:** ANSYS Fluent (Level: Intermediate)
- Microsoft** Excel, Word, PowerPoint, Visio (Level: Good)
- AnyBody Modeling System (AMS) - A software related to **ergonomics, biomechanics, and medical analysis**. (Level: Intermediate)
- Graphic Design Software:** Adobe Photoshop and Illustrator (Level: Beginner)
- Programming Languages:** MATLAB – matrix based software (Level: Intermediate)

### Personal Strength

- Good knowledge in fluid mechanics, thermodynamic and mechanic of materials.
- In-depth knowledge in liquid particle count (LPC) for contamination control.

### Technical Skills

- Operating lathe machine.
- Milling machine
- Handling liquid particle counter machine (CLS-700)
- Laptop/PC maintenance and repair

### Languages Proficiency

#### Malay

- Spoken: Fluent
- Written: Excellent

#### English

- Spoken: Good
- Written: Excellent

#### Japanese

- Spoken: Basic
- Written: Basic

## Working Experience

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**Polish Engineer Executive**  
**Western Digital – HGST (SL1M)**

**05/2017 - Current**  
**Kuching, Sarawak**

- Preparing equipment operation and troubleshooting procedure.
- Project coordinator of piping installation jobs.
- Responsible for troubleshooting High Pressure Wash (HPW) Standalone machine (HPW is a machine that provide deionized water for polishing machines for cleaning purposes).
- Monitor and analyze liquid particle count reading before machines release for production purposes.
- Responsible for polishing machine sustainability and preventive maintenance.
- Preparing machine checklist.

## Project Done

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1. Musculoskeletal analysis of traction therapy for the treatment of low back pain. (Using AnyBody Modeling System) – Year 2016
  - Investigating the lumbar part of spine (L1-L5 vertebrae)
  - Study the effect of traction to the biomechanical of lumbar spine.
  - Proved the effectiveness of traction therapy.
2. Automated Production of Sarawak Layer Cake – Year 2016
  - Responsible in analyzing the effect of cooling and pressing of Sarawak Layer Cake making process.
  - Design cooling and pressing automatic mechanism (using SOLIDWORKS).
  - Selecting appropriate and suitable material for food and beverage industry.
  - Designing the conveyor system for product transport.
  - Finite element analysis of machine part design.
  - Experiment of machine mechanism (making machine part prototype).
3. Simulation of bearing design using ANSYS Fluent – Year 2016
4. Investigating the behavior/tendency of drivers with traffic light (Red, Amber, Green). – Year 2016
  - Preparing the control chart for the study.

## Achievements/Awards

Achievements	Year	Remark
Participate in Innovation Technology Expo (InTEX) 2016 at DeTAR Putra, UNIMAS	2016	Bronze medalist for the invention of Malaysian Musculoskeletal Models for Biomechanics Analysis
Dean List Award Semester 8	2016	Dean List
Dean List Award Semester 3	2013	Dean List
Asasi UNIMAS Sport Day	2011	Badminton sport executive/Match umpire
Asasi UNIMAS Sport Day	2011	Chess game participant (5 <sup>th</sup> place overall)
2010 MSS Betong Chess Championship	2010	Participant
2009 MSS Betong Chess Championship	2009	U-18 individual 5 <sup>th</sup> place/team champion
2009 MSS Sarawak Chess Championship	2009	Participant
2008 MSS Betong Chess Championship	2008	Participant/team champion
2008 MSS Sarawak Chess Championship	2008	Participant
2007 MSS Betong Chess Championship	2007	U-15 individual 1 <sup>st</sup> place/team champion

## References

### Noor Aliah Bt Abd Majid

*Final Year Project Supervisor/Lecturer*

Department of Mechanical and Manufacturing  
Engineering

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### Chong Kah Hiung

*Supervisor during SLIM Training*

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Polish Department

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