

# AZRUL ZULHILMI AHMAD ROSLI

Gombak, Kuala Lumpur (Internship: Oct 25 – Feb 26)

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## PROFILE

Master's student in Data Science and Analytics with a background in Chemical Engineering, skilled in Python, R, SQL, Hive, and Spark for machine learning, unstructured data analysis, and data management. Experienced in building analytical workflows and visualizing insights using Power BI, Tableau, and statistical modelling. Actively seeking a data science internship for five months (6<sup>th</sup> October 2025 – 13<sup>th</sup> February 2026) to apply and grow technical skills in a real-world environment.

## EDUCATION

### Universiti Kebangsaan Malaysia (UKM)

Sept 24 - Present

*Master of Science in Data Science and Analytics*

- Current CGPA: 3.56 (Dean's List)

### Universiti Kebangsaan Malaysia (UKM)

Sept 19 - August 23

*Bachelor of Chemical Engineering with Honours*

- CGPA: 3.47 (Dean's list for 3 Semester out of 8 Semester)

### Kolej Matrikulasi Negeri Sembilan (KMNS)

May 18 - April 19

*Matriculation Certificate in Life Sciences (Sains Hayat)*

- CGPA: 3.79
- Muet: Band 3

## WORKING EXPERIENCE

### Puncak Tegap Sdn Bhd

Aug 23 – May 24

*Data Management Services (DMS) Assistant | Contract*

*Petaling Jaya, Kuala Lumpur*

- Operated data entry systems efficiently, ensuring accurate and timely input while consistently meeting daily KPIs.
- Verified and validated data to uphold high accuracy standards and maintain data integrity.
- Maintained organized filing systems through meticulous sorting and documentation practices.
- Adhered strictly to customer data privacy regulations and upheld professional work standards at all times.

### FARMASIA Sdn Bhd

Aug 22 – Oct 22

*Production Trainee | Internship | Part-time*

*Bandar Baru Bangi, Selangor*

- Maintained the production lane for the entire process from raw material request until quarantine of the products.
- Responsible in troubleshooting and investigating issues from daily operation, and ensure sure production meets the quality, daily planner and completing the Batch Manufacturing Reports (BMRs).
- Support daily production activities, performing product quality (IPQC) and maintain batch acceptability above 95%.
- Installed and operated machines, ensuring that all batch numbers and data were in accordance to the regulatory standard.
- Performed analysis for Certificate of Analysis (COA) and performed water sampling.
- Prepared and participated in audits from Nano Malaysia, Kementerian Kesihatan, and Good Distribution Manufacturing Practice Medical Device (GDMPMD), ensuring compliance with all applicable regulations.
- Conducted regular inspections of warehouse facilities to ensure compliance with safety regulations.
- Served a client during their visits to the cleanroom by explaining the procedures and answering the questions in a clear and concise manner.
- Supervised a team of packers and part-timers to ensure efficient and accurate packing of products.

## LEADERSHIP EXPERIENCE & UNIVERSITY ACTIVITIES

### Chemical Engineering Student Club (CheSC-SC IChemE UKM)

Oct 21 - Aug 22

*Programme & Technical Executive*

- Managed the entire technical operations of the club, including floor plan, and equipment especially during the event.
- Managed a team of technical staff and support to ensure that they were able to perform their duties effectively.
- Coordinated with other departments within the club, ensuring that the club's technical needs were met.

### Entrepreneurship Carnival of Faculty of Engineering and Built Environment

June 21

*Deputy Project Director*

- Successfully organized and managed the Entrepreneurship Carnival at Faculty with over hundred participants.

- Selected and handled guest speakers for the carnival, including successful entrepreneurs and industry experts.
- Ensured the smooth operation of the carnival, including logistics, marketing, and event management.

## RELATED PROJECT

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### Airline On-Time Performance Analysis (2007)

June 25

*Data Management & Analytics | HiveQL on Hadoop, SQL, Python*

- Ingested and managed 7M+ flight records by uploading CSVs to HDFS, then automated ETL and HiveQL-based querying using PyHive and Jupyter Notebooks for scalable analysis and reporting.
- Performed complex SQL joins, aggregations, and window functions in Hive to derive insights on delays, cancellations, and high-risk routes.
- [GitHub Link](#)

### Metacritic Genre Analysis: Comedy vs Horror

May 25

*Web Scraping & Text Mining | R*

- Web scraped 11K+ movie entries from Metacritic using rvest and automated HTML parsing.
- Cleaned and tokenized plot summaries, performed sentiment analysis with the NRC lexicon, extracted genre-specific terms via TF-IDF, and visualized trends and forecasts using ggplot2 and ARIMA models.
- [GitHub Link](#)

### Synthesis of Slow-Release Biofertilizer from Aquaculture Sludge

Oct 22 - Jul 23

*Final Year Project*

- Conducted extensive literature reviews on slow-release fertilizer, nutrient recovery technology, aquaculture sludge behaviour, potential benefits, drawbacks, and plant performance using slow-release fertilizers.
- Handle chromatography ion and analysed data using statistical tools such as ANOVA.
- Successfully synthesized a slow-release fertilizer from aquaculture sludge by releasing 37% nutrient slower than normal fertilizers.

### Urea Synthesis using Green Ammonia Technology

Oct 22 - Jul 23

*Final Year Design Project | Leader*

- Performed a literature review, material and energy balance, designed the flow diagram, and applied thermodynamics and fluid mechanics to develop a safe and efficient process design.
- Employed simulation tools (SYMMETRY) to model and simulate the entire system for comprehensive evaluation.
- Conducted an industrial safety study for the plant, starting from the raw material sources, hazard and operability (HAZOP), and hazard identification, risk assessment, and risk control (HIRARC) and including the layout of the plant.
- Created a detailed 3D plant layout (SketchUp), integrating equipment placement, process flow, and safety considerations.
- Received the award for Best Presenter during the final year design project presentation.

## SKILLS

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- **Major Course:** HACCP, GMP, Industrial Safety, Unstructured Data Analytics, Machine Learning, Data Management, Time Series and Forecasting, Business Analytics, Data Mining, Computational Math and Statistics, HADOOP, GDMP
- **Graduate Engineer: Chemical**
  - Registered no.: G1242186A
- **Certificate: Certified Occupational Safety & Health Coordinator (OSH-C)**
  - Registered no.: WP/23/OSHC/02/02068
- **Technical:** Microsoft Office, Visio, AutoCAD, SuperPRO, SketchUp, COMSOL, SYMMETRY, MATLAB, IBM SPSS, R, Python, Spark, SQL, Power BI, Tableau
- **Language:** Malay (Native), English (Fluent)

## REFERENCES

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1. **Prof. Madya Dr. Mohd Aftar Bin Abu Bakar**  
*Senior Lecturer & Head of Department*  
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