

# **Brief CV**

| Name                      | Nurul Akmar Binti<br>Emran                                       | 中文名                 |                            |   |
|---------------------------|--|---------------------|----------------------------|---|
| Gender                    | FEMALE   | Title<br>(Pro./Dr.) | ASSOCIATE<br>PROFESSOR DR. |   |
| Position (President)      | NONE   | Country/<br>Region  | MALAYSIA                   | g |
| University/<br>Department | Universiti Teknikal Malaysia Melaka                              |                     |                            |   |
| Personal Website          | https://sites.google.com/view/nurulemran/home                    |                     |                            |   |
|                           | a. Advanced database applications and query optimization         |                     |                            |   |
|                           | b. Data quality (Completeness/Privacy and Accessibility)         |                     |                            |   |
| Research Area             | c. Database storage space optimization for green data management |                     |                            |   |
|                           | d. Multimedia databases  |                     |                            |   |
|                           | e. Open Data/Big Data management                                 |                     |                            |   |

## **Brief introduction of your research experience:**

My research interests are in data/information quality, big data management, bioinformatics, databases, data security, database storage optimization and in-database analytics.

In terms of research grants, I was the principal researcher of two national grants, and two university's grants which all have been completed. The details of these grants are as follow:

- FRGS (RACE)/2012/FTMK/SG05/02/1 F00155], "Novel functional Dependency Approach for Storage Optimisation in Green Microbial Data Centers", RM50, 000. 1/12/2012 – 30/11/2014. (NATIONAL GRANT)
- 2. FRGS/1/2015/ICT04/FTMK/02/F00289, "Enhanced Big Data Analytical Reporting Using Hybrid Materialized Views Storage For Manufacturing Execution System (MES)", RM69,000, 1/11/2015-31/10/2018. (NATIONAL GRANT)
- 3. PJP/2012/FTMK(1D)/S001002, "Characterisation of Data Set Features for Space Optimisation Using Functional Dependency", RM11,700, 1/06/2012 30/11/2013. (UNIVERISTY GRANT)
- 4. PJP/2014/FTMK(9D)/S01366, "Measuring Accuracy of Query Results for Smart City Data Centers



Space Optimisation", RM7,000, 1/08/2014 - 31/01/2016. (UNIVERISTY GRANT)

I also contribute as co researcher for the following research grants (from 2006-2019) at national, university and industry levels as follow:

#### Fundamental Research Grant Scheme (FRGS) (Member):

- 1. FRGS/1/2015/ICT04/FTMK/02/F00286, "Enhancing Tchbichef Moments to improve query processing performance for multimedia information indexing and retrieval", RM78,200.00, 1/11/2015-31/10/2017.
- 2. FRGS/1/2016/SS06/PBPI-CTED/F00330, "A New Model Based On actor-Network Theory to Enhance the Usage of Online Halal Certification", RM55,000.00, 8/1/2016-31/7/2018.
- 3. FRGS/1/2016/ICT04/UPM/01/2, "Threshold-based Probabilistic Interval Sjyline Queries for Efficient Skyline Comutation on Big Data", RM 57528.00, 1/8/2016-31/7/2018.
- 4. FRGS/1/2017/ICT02/UTEM/02/6, "A New Block Formation Featutres for Subword Recognition in Arabic Big Data Images", RM69,200.00, 15/8/2017-18/8/2019.
- 5. FRGS/1/2018/ICT02/UTEM/02/2, "A New Two-level Cooperative Coevolutionary Algorithm for Multitier Materialized Views Selection Problem in Cybermanufacturing Datawarehouses", RM56528.30, 1/1/2019-31/12/2020.

#### **Research Acculturation Grant Scheme (RAGS) (Member):**

6. RAGS/2012/FTMK/SG05/1 B00016, "A Novel Swarm Optimized Rough Apriori Model for Mining Significant Resistant Single Nucleotide Polymorphism Subset in Obesity Gene Variants Diagnosis", RM52,270, 15/12/2012 - 14/11/2014.

## University's Research Grant (Member):

- 1. PJP/2005/FTMK(7)/S00159, "Information Retrieval for Biometric Databases", 11/01/2005 31/10/2006.
- 2. PJP/2006/FTMK(1)/S00195, "Integration Of Intelligence Data Mining With A Geographic Information System Using Neural Network To Support Spatial Patern Recognition", 1/06/2006 30/11/2007.
- 3. PJP/2012/C-ACT/Y0003, "Ubiquitous Personalised Health Record System", RM 150,000, 2/11/2012-31/11/2013
- 4. PJP/2013/FTMK(7D)/S01159, "A hybrid collaborative filtering and content-based approach for personalized hotel recommender system", RM18,000.00, 1/6/2013-30/11/2014.



- 5. PJP/2013/FTMK(22D)/S01253, "Data Sharing Model for Virtual Cooperative Medical Tourism System using On-Demand Data Integration Approach", RM12,900.00, 1/10/2013-30/4/2015.
- 6. PJP/2016/FTMK/HI3/S01475, "The development of NC Dashboard For UTeM Performance Diagnostics Data Visualization", RM183,800.00, 1/3/2016-31/8/2017.
- 7. PJP/2016/FTMK/HI2/S01469, "The development of Short Message system (SMS) Gateway for PRIM", RM66,000.00, 1/3/2016-31/8/2017.
- 8. PJP/2016/FTMK/HI2/S01470, "The development of Test and Examination Module for PRIM", RM66,000.00, 1/3/2016-31/8/2017.
- 9. PJP/2016/SILTERRA/FTMK-CACT/S01509, "Big Data Storage Allocation Optimization for Manufacturing Execution System (MES) Using Evolutionary Algorithm ",RM15,000.00, 1/11/2016-31/8/2017.
- 10. PJP/2017/FTMK-CACT/S01573, "Improving the Quality of Software Requirements Specification (SRS) Through a Boilerplate Technique", RM25,000.000, 1/6/2017-30/11/2018.
- 11. PJP/2017/IPTK/S01521, "UTeM Integrated Personality Profiling System (UTeM i-Pro), RM88,900.00, Duration 1/1/2017-31/1/2018.

#### **Industrial Grant (Member)**

- 12. Gluar/TUXURI/2017/FTMK-CACT/I00031, "Location Intelligence Based Vehicle Tracking and Fleet Management System", RM25,000.00, 1/10/2017-30/9/2019.
- 13. GLUAR/MUSTREAD/2017/FPTT-CTED/I00029, "Development Of Online Integrated Sales System: A New Smart Platform Of Dropshipping Supply", 2017-2018.

## **Knowledge Transfer Program Grant (Member)**

- 14. GLuar/KTP/1/2014/FTMK/FK/G00021, "Parental Relationship Information Mangement (PRIM)" Transfer of Knowledge to Community, RM78,000, 1/1/2014 31/12/2014.
- 15. GLuar/KTP/1/2016/FTMK-CACT/LLS/G00046, "Sistem Pengurusan Maklumat Kesihatan Warga Emas" Transfer of Knowledge to Community, RM52,275. 15/1/2017-14/1/2018.

### **Public-Private Research Network (PPRN) Grants (Member)**

 GLuar/PPRN/2015/FTMK/G00033, "Voice Navigation Sdk For Android Based Application", RM30,000, 15/3/2015-15/9/2015.

\*\*\*\*\*All the columns need to be filled in.