ASSOC. PROF. DR. MOHD FAHMI BIN MOHAMAD AMRAN

Deputy Dean (Academics and Undergraduate)

Faculty Defence Science and Technology

National Defence University of Malaysia (UPNM)

PARTICULARS

- Nationality: Malaysian
- Gender: Male
- Race: Malay
- Marital Status: Married
- E-mail: fahmiamran@upnm.edu.my/fahmi.mohd@gmail.com
- H/P No: +6012-3629449
- SCOPUS ID: https://www.scopus.com/authid/detail.uri?authorId=57361488900
- ORCID ID: https://orcid.org/0000-0003-4378-5971

ACADEMIC QUALIFICATIONS

- **Doctor of Philosophy (Visual Informatics)**
  Universiti Kebangsaan Malaysia (UKM), 2013
- **M.Sc. Information Technology**
  Universiti Teknologi Malaysia (UTM), 2006
- **B.Sc. (Hons.) Computer Science**
  Universiti Teknologi Malaysia (UTM), 2004

WORKING EXPERIENCES

- **National Defence University of Malaysia**
  Associate Professor (DS 54)
  Computer Science Department
  Faculty of Science and Defense Technology
  2021 – present

- **National Defence University of Malaysia**
  Deputy Dean (Academics and Undergraduate)
  Faculty of Science and Defense Technology
  2023 - 2024

- **Eurecom Institute, Nice, France**
  Visiting Professor
  Digital Security Department
  2022

- **National Defence University of Malaysia**
  Head of Department (Computer Science)
  Faculty of Science and Defense Technology
  2020 - 2022

- **National Defence University of Malaysia**
  Research Fellow
  Cyber Security Centre
  2017 - 2019

- **National Defence University of Malaysia**
  Senior Lecturer (DS 51)
  Computer Science Department
  Faculty of Science and Defense Technology
  2016 - 2021

- **Universiti Selangor**
  Senior Lecturer (DS 52)
  Faculty of Computer Science and Information Technology
  2006 - 2016

- **Authentic Venture Sdn. Bhd.**
  Programmer
  2006

- **Universiti Teknologi Malaysia (UTM)**
  Teaching Assistant
  2005

POST GRADUATES SUPERVISION

PhD

1. Muhammad Fairuz bin Abd Rauf, “Refining Parkinson's Disease Patients Quality of Life (Qol) Through Implementation of Kinect”, 2023, completed. Role: **Co Supervisor**.

2. Nooraida binti Samsudin. "Skema Euler bagi Persamaan Terbitan Biasa (PTB)", 2020, completed. Role: **Co Supervisor**

3. Mohd Sidek Fadhil bin Mohd Yunus, “A Novel Graphical Password Clustering Method for Fault Tolerance Mechanism”, 2020, completed. Role: **Co Supervisor**

4. Sharifah Nabila binti S Azli Sham, “IoT Attacks Prediction using Hybrid Machine Learning Techniques in Smart City Security Framework”, 2022 - ongoing. Role: **Co Supervisor**

5. Nurul Natasha Awinda Binti Mohammad Nizam, “EEG Signals Analysis to Classify Emotions and Level of Performance within Sports Athletes”, 2021 - ongoing. Role: **Main Supervisor**

6. 'Atifah Hanim binti Rosli, “User Experience and Gamification in Online Teaching and Learning using IoT”, 2021 - ongoing. Role: **Co Supervisor**

7. Mohd Afiq bin Zamanhuri, "Usability Framework of Mixed Reality and Distance Learning in Military Decision Making", 2020 - ongoing. Role: **Co Supervisor**

8. Zuraidy bin Adnan, “Social Network Trend Analysis for Digital Forensic Investigation”, January 2015 - ongoing. Role: **Main Supervisor**

9. Suhaimi bin Mohd Noor, “Conceptual Framework of Augmented Reality Display in Digital Photography Techniques.” January 2015 - ongoing. Role: **Main Supervisor**.

10. Nur Razia bt Mohd Suradi, "Improved of Value-Based Requirements Prioritization Techniques for Software Product Management", July 2015 - ongoing. Role: **Main Supervisor**.

11. Mohammad Ashri Abu Hassan, "Applying Canny on Bone Joint to Calculate Bone Density using Sample Line Histogram Method", July 2015 - ongoing. Role: **Main Supervisor**.

Master by Research

1. Nuraini binti Shamsaimon, “Predictive Analytical Model for Safety and Security of Connected Vehicles Usage in Critical Infrastructure”, 2022 - completed. Role: **Co Supervisor**

2. Yamunah Kathiravan, “Enhancement of Web Browser Encryption for Counter Digital Forensics Technique”, completed, 2020. Role: **Main Supervisor**

3. Venothanee Sundra Mohan, “A Study on Emotion Classifications in EEG Signals Emotion

Classifications in Electroencephalogram (EEG) Signals", completed, 2020. Role: **Main Supervisor**

4. Muhammad Danial bin Dainil, "Decision Tree Approach for Enhancing Asthma Exacerbation Prediction Model", ongoing, 2023. Role: **Main Supervisor**

TEACHING EXPERIENCES

Master

Research Methodology	Issues for IT Professional Practices
IT Project Management	Business Intelligence
Big Data Security	E-Business Technology and Management
Special Topics in IT	Interactive System Design

Degree/Diploma

Object Oriented Programming	Operating Systems
Data Structures and Algorithms	Research Methodology
Computer Network	Interaction Design
Web Application Development	E-Business Technology and Management
Computer Application	Computer Architecture and Organization
Mobile Programming	Discrete Mathematics for IT
Introduction to Web Design	Interactive Multimedia
Database Systems	Digital Image Processing
Ethics in Information Technology	Operation Research
Supply Chain Management	Automata Theory & Computation

RESEARCH/CONSULTATION PROJECTS

No.	Title	Grant Year	Amount (RM)	Status
1.	A Pixel Value Password Scheme on Mobile Devices for Access Control Applications	Dec 2016-Nov2018	45,000	Completed
2.	Development of Knowledge - Based Software with enhanced Situational Awareness Analysis for Infantry Personnel	Dec 2013 - Dec 2018	981,940	Completed
3.	Securing Communication Network Based On New Industry Encryption Method	Dec 2016-Nov2018	50,000	Completed
4.	Semantic-based Malay Grammar for Social Network Threat Analysis	Dec 2016-Nov2018	40,000	Completed
5.	UPNM Smart Greenhouse Prototype Accomodate By Internet of Thing Technology	Dec 2016-Nov2018	20,000	Completed
6.	Kajian Dinamika Sosio Politik di Selangor	Mac 2017 - Jun 2017	35,800	Completed
7.	A System for Real-time Wave Energy Detection and Early Warning	Jun 2018 – May 2020	250,000	Completed
8.	Improvement On Rehabilitation Process For Parkinson Patient Using Exergames (Exercise Game)	April 2018 – March 2020	20,000	Completed
9.	The Effectiveness Of Electroencephalogram-Neurofeedback (EEG-NF) For Measuring Peak Performance Military Training	April 2018 – March 2020	20,000	Completed
10.	Prototyping Digital Tongue Diagnosis System On Raspberry-Pi For Smart Military Healthcare System	Dec 2018 – Dec 2020	20,000	Completed
11.	Data Quality Assessment In Big Data Analytics Application Based On Pls-Adaptive Neuro-Fuzzy Inference	Dec 2018 – Dec 2020	20,000	Completed
12.	Security Enhancement of Private Browsing Mode With Encryption For Counter Digital Forensics Technique	July 2019 – June 2021	5,000	Completed
13.	UPNM Clinic Management System	September 2019 – September 2021	75,600	Completed
14	Modelling Emotion Mining for National Security Threats in Cyberspace	July 2020 – Jun 2022	20,000	Completed

No.	Title	Grant Year	Amount (RM)	Status
15.	Recognizing the Electroencephalogram (EEG) Waveform of Students Emotions Level and Performance Level during Classroom Interaction	July 2021 – Jun 2023	20,000	Completed
16.	A Multi-Swarm Particle Swarm Optimization Algorithm for Feature Selection in Drug Review based on Medical Sentiment Lexicon Analysis	July 2021 – Jun 2023	20,000	Completed
17.	Virtual Reality (VR) Application to Improve Health-Care Workers Preparedness in Pandemic Management	Oct 2021 – Sept 2022	61,000	Completed
18.	Support Vector Machine Regression Model for Inverse Kinematic Motion Control of Automation Robotics	Sept 2021 – Aug 2023	75,200	Completed
19.	Mobile Health Application Moel User Experience towards Effectiveness of Asthma Management	Sept 2022 – Aug 2024	20,000	In Progress
20.	Machine Learning-based Optimization of Terminal Bus Routes and Ticket Sales Prediction: A Case Study	Mac 2024 – Feb 2025	20,000	In Progress