

PROF. MADYA TS. DR. M NORAZIZI SHAM BIN MOHD SAYUTI

PENSYARAH UNIVERSITI DS14

CONTACT

PHONE

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E-MAIL

azizi@usim.edu.my

FACULTY

Fakulti Kejuruteraan Dan Alam Bina

SUPERVISION

	COMPLETED	ONGOING
PhD	2	1
Master	0	1

AREAS OF EXPERTISE

Embedded Systems | System-on-chip (soc) | Evolutionary Computations

ACADEMIC QUALIFICATION

2015 **PhD**

2004 **Master** - Software Engineering

2001 **Bachelor** - Electronic Engineering

RESEARCH

1. **UNCERTAINTY MODELLING WITH STOCHASTIC PROCESS FOR ROBUST REAL-TIME SCHEDULABLILTIY ANALYSIS**
   2023 | GERAN PENYELIDIKAN USIM | ON GOING | MAIN RESEARCHER

2. **DEVELOPMENT OF MOBILE APPLICATION FOR WOMEN'S "PRELOVED" BUSINESS PLATFORM: FASHION ARCHADE (FACADE)**
   2022 | GERAN PENYELIDIKAN AGENSI KERAJAAN | COMPLETED | CO-RESEARCHER

3. **AI-BASED STUDENT ATTENDANCE AND ENGAGEMENT ALGORITHM IN SOC-FPGA**
   2022 | BIDUNI MIZANNIYAH | COMPLETED | MAIN RESEARCHER

4. **AUTONOMOUS HUMAN DETECTION AND LOCALIZATION USING MACHINE LEARNING**
   2021 | GERAN KPT (KKP) | COMPLETED | CO-RESEARCHER

5. **BALANCED COVER AUDIO SUGGESTION FOR AUDIO STEGANOGRAPHY ALGORITHM BASED ON NSGA-II, SEGMENTATION AND CHAOTIC MAP**
   2020 | GERAN KPT | COMPLETED | CO-RESEARCHER

RESEARCH

6. MODELLING AND CONTROL OF AN AERIAL TRANSPORTATION SYSTEM CARRYING SUSPENDED PAYLOAD

2020 | GERAN PENYELIDIKAN USIM RACER | COMPLETED | CO-RESEARCHER

7. MODELLING AND ANALYSIS OF COVID-19 SPREADING PROCESS ON COMPLEX NETWORKS

2020 | GERAN PENYELIDIKAN COVID-19 | COMPLETED | MAIN RESEARCHER

8. DEVELOPMENT OF HOME LELECTROCARDIOGRAM ASSESMENT REALIABLE TOOL (HEART) : A CLOUD BASED, WEARABLE, WIRELESS, SINGLE-LEAD ELECTROCARDIOGRAM

2019 | GERAN SEPADAN INDUSTRI | ON GOING | CO-RESEARCHER

9. SECURITY-HARDENED DESIGN SPACE EXPLORATION FOR HARD REAL-TIME EMBEDDED NOC IN CYBER-PHYSICAL SYSTEMS

2018 | GERAN PENYELIDIKAN USIM | COMPLETED | CO-RESEARCHER

10. EVOLUTIONARY MULTI-OBJECTIVE OPTIMIZATION FOR COVER AUDIO SELECTION IN AUDIO STEGANOGRAPHY

2017 | GERAN KPT | COMPLETED | CO-RESEARCHER

11. A NEW MODEL FOR CONTENT UNDERSTANDING AND KNOWLEDGE DISSEMINATION OF THE QURAN USING INTELLIGENT DATA MODEL

2016 | GERAN KPT | COMPLETED | CO-RESEARCHER

12. A NEW CRYPTOGRAPHHY ALGORITHM DERIVED FROM QURANIC MAQAMAT FOR PREVENTING ACCOUSTIC ATTACKS.

2016 | GERAN KPT | COMPLETED | CO-RESEARCHER

13. ANALYSIS OF ACOUSTIC EMANATION BEHAVIOURAL CHARACTERISTICS AND QURANIC MAQAMAT ON AES-BASED BLOCK CIPHER

2016 | GERAN KPT | COMPLETED | MAIN RESEARCHER

14. SIMULANEOUS EXPLORATION OF MAPPING AND ROUTING ON HARD REAL-TIME EMBEDDED NETWORKS-ON-CHIP

2016 | GERAN JANGKA PENDEK FASA 1 | COMPLETED | MAIN RESEARCHER

15. THE DESIGN AND EVALUATION OF AN INTERACTIVE QIRAAT MOBILE APPLICATION

2015 | GERAN PENYELIDIKAN JANGKA PENDEK | COMPLETED | CO-RESEARCHER

16. A NEW MULTI-RELATIONAL LATENT SEMANTIC ANALYSIS MODEL FOR EXTRACTING PROPHETIC HADITH CONCEPT

2014 | GERAN KPT | COMPLETED | CO-RESEARCHER

17. SECURING CRYPTOGRAPHIC KEY USING FINGER VEIN BASED FUZZY VAULT

2011 | GERAN PENYELIDIKAN FUNDAMENTAL | COMPLETED | CO-RESEARCHER

18. SEGEMENTATION OF MALARIA PARASITES ON STAINED BLOOD FILMS

2011 | GERAN PENYELIDIKAN FUNDAMENTAL | COMPLETED | CO-RESEARCHER

RESEARCH

19. DESIGN OF AN IMPROVED SECURE KEY MANAGEMENT PROTOCOL IN MULTICAST COMMUNICATION

2011 | GERAN PENYELIDIKAN FUNDAMENTAL | COMPLETED | CO-RESEARCHER

20. COMPARISON STUDY BETWEEN EXPECTATION & EXPERIENCE OF ICT PROVISION IN UNIVERSITY

2009 | GERAN PENYELIDIKAN PANTAS BAWAH SETAHUN | COMPLETED | MAIN RESEARCHER

21. KAJIAN PEMBANGUNAN KANDUNGAN PROJEK SISTEM PENGURUSAN FATWA (FMS) INFAD

2008 | GERAN KPT | COMPLETED | CO-RESEARCHER

PUBLICATION

1. TOWARD PREDICTABLE DEFLECTION ROUTING IN ROUTERLESS NOCS FOR REAL-TIME SYSTEMS

2025 IEEE 18TH INTERNATIONAL SYMPOSIUM ON EMBEDDED MULTICORE/MANY-CORE SYSTEMS-ON-CHIP (MCSOC)

2025 | PROCEEDING | SCOPUS | MAIN AUTHOR

2. A CNN PLASTIC DETECTION MODEL FOR EMBEDDED PLATFORM OF ROV

1ST INTERNATIONAL CONFERENCE ON ADVANCES IN MACHINE INTELLIGENCE, AND CYBERSECURITY TECHNOLOGIES (AMICT)

2024 | PROCEEDING | WOS | CO-AUTHOR

3. IMPROVING DYNAMIC SECURITY OF THE LEAST SIGNIFICANT BIT USING BLOCK-BASED CHAOTIC MULTI-LEVEL LSB (BCM-LSB)

THE 9TH INTERNATIONAL CONFERENCE ON CYBER SECURITY, PRIVACY IN COMMUNICATION NETWORKS (ICCS 2023)

2024 | PROCEEDING | SCOPUS | CORRESPONDING AUTHOR

4. OPTIMISED COVER SELECTION FOR AUDIO STEGANOGRAPHY USING MULTI-OBJECTIVE EVOLUTIONARY ALGORITHM

JOURNAL OF INFORMATION AND COMMUNICATION TECHNOLOGY

2023 | JOURNAL | SCOPUS | CO-AUTHOR

5. A METHOD OF COVER AUDIO SELECTION FOR EMBEDDING BASED ON VARIOUS CRITERIA

1ST INTERNATIONAL CONFERENCE ON ADVANCES IN MACHINE INTELLIGENCE, AND CYBERSECURITY TECHNOLOGIES (AMICT2023)

2023 | PROCEEDING | NON-INDEX | CORRESPONDING AUTHOR

6. REAL-TIME NETWORKS-ON-CHIP SYSTEM-LEVEL DESIGN SPACE EXPLORATION

2023 | BOOK | MAIN AUTHOR

7. INTEGRATED CIRCUIT CHIP FABRICATION

TECHNOLOGIES IN SCIENCE AND ENGINEERING A MULTIDISCIPLINARY APPROACH

2023 | CHAPTER IN BOOK | MAIN AUTHOR

8. A NEW METHOD TO ESTIMATE PEAK SIGNAL TO NOISE RATIO FOR LEAST SIGNIFICANT BIT MODIFICATION AUDIO STEGANOGRAPHY

PERTANIKA JOURNAL OF SCIENCE AND TECHNOLOGY

2022 | JOURNAL | ISI, SCOPUS AND ERA | CO-AUTHOR

PUBLICATION

9. QURANIC ACOUSTIC AN ANALYIS FOR CRYTOGRAPHIC APPLICATION

2022 BOOK EDITOR

10. PROFILING OF QURANIC MAQAMAT USING AN ENHANCED AUDIO FEATURE EXTRACTION METHOD

QURANIC ACOUSTIC AN ANALYIS FOR CRYTOGRAPHIC APPLICATION

2022 CHAPTER IN BOOK CORRESPONDING AUTHOR

11. INTRODUCTION

QURANIC ACOUSTIC AN ANALYIS FOR CRYTOGRAPHIC APPLICATION

2022 CHAPTER IN BOOK MAIN AUTHOR

12. FAULT CRYPTANALYSIS ON ADVANCED ENCRYPTION STANDARD

QURANIC ACOUSTIC AN ANALYIS FOR CRYTOGRAPHIC APPLICATION

2022 CHAPTER IN BOOK CORRESPONDING AUTHOR

13. Establishing A Correlation Between Acoustical Properties In Maqamat Recitation And Meaning Of Surahs In Juz' Amma Using Audio Feature Extraction Method

QURANIC ACOUSTIC AN ANALYIS FOR CRYTOGRAPHIC APPLICATION

2022 CHAPTER IN BOOK CORRESPONDING AUTHOR

14. ESTABLISHING A CORRELATION BETWEEN ACOUSTICAL PROPERTIES IN MAQAMAT RECITATION AND MEANING OF SURAH JUZ' AMMA USING AUDIO FEATURE EXTRACTIO METHOD

QURANIC ACOUSTIC AN ANALYSIS FOR CRYPTOGRAPHIC APPLICATION

2022 CHAPTER IN BOOK CO-AUTHOR

15. CELSIUS TRACKER: A MOBILE APPLICATION TO EASE MOVEMENT CONTROL ORDER PROCEDURE DURING COVID-19 PANDEMIC

15TH INTERNATIONAL CONFERENCE ON OPEN SOURCE SYSTEMS AND TECHNOLOGIES (ICOSST)

2021 PROCEEDING NON-INDEX MAIN AUTHOR

16. A NEW METHOD TO ESTIMATE PEAK SIGNAL TO NOISE RATIO FOR LEAST SIGNIFICANT BIT MODIFICATION AUDIO STEGANOGRAPHY

INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS OF SCIENCE AND TECHNOLOGY

2020 PROCEEDING NON-INDEX CO-AUTHOR

17. ON SELECTED ISSUES OF BOOLEAN FUNCTION APPLICATION IN SYMMETRIC KEY CRYPTOGRAPHY AGAINST SIDE CHANNEL ATTACKS

JOURNAL OF PHYSICS: CONFERENCE SERIES

2019 JOURNAL SCOPUS CO-AUTHOR

18. TASK MAPPING AND ROUTING OPTIMIZATION FOR HARD REAL-TIME NETWORKS-ON-CHIP

BULLETIN OF ELECTRICAL ENGINEERING AND INFORMATICS

2019 JOURNAL SCOPUS MAIN AUTHOR

19. SUBSTITUTION BOX DESIGN BASED FROM SYMMETRIC GROUP COMPOSITION

JOURNAL OF PHYSICS: CONFERENCE SERIES

2019 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

20. BALANCING THE TRADE-OFF BETWEEN CAPACITY AND IMPERCEPTIBILITY FOR LEAST SIGNIFICANT BIT AUDIO STEGANOGRAPHY METHOD: A NEW PARAMETER

2019 IEEE CONFERENCE ON APPLICATION, INFORMATION AND NETWORK SECURITY (AINS)

2019 PROCEEDING NON-INDEX CO-AUTHOR

21. OUTCOME-BASED EDUCATION FOR ENGINEERING PROGRAMME A CASE STUDY OF USIM

2019 BOOK CO-AUTHOR

22. HARD REAL-TIME EMBEDDED NOC DESIGN SPACE EXPLORATION

ADVANCES IN SUSTAINABLE LIVING ENGINEERING & BUILT ENVIRONMENT

2019 CHAPTER IN BOOK MAIN AUTHOR

23. A SYSTEMATIC REVIEW ON SEMANTIC-BASED ONTOLOGY FOR QURANIC KNOWLEDGE

INTERNATIONAL JOURNAL OF ENGINEERING AND TECHNOLOGY(UAE)

2018 JOURNAL SCOPUS CO-AUTHOR

24. FORMATIVE EVALUATION OF AN EDUCATIONAL MOBILE APPLICATION: AN INTERACTIVE MYQIRAAT APPLICATION

INTERNATIONAL JOURNAL OF ENGINEERING AND TECHNOLOGY(UAE)

2018 JOURNAL SCOPUS CO-AUTHOR

25. SIMULTANEOUS MULTI-OBJECTIVE OPTIMISATION FOR LOW-POWER REAL-TIME NETWORKS-ON-CHIP

4TH INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONICS AND SYSTEM ENGINEERING (ICEESE2018)

2018 PROCEEDING NON-INDEX MAIN AUTHOR

26. SIMULTANEOUS TASK MAPPING AND ROUTING OPTIMIZATION FOR SCHEDULING HARD REAL-TIMEEMBEDDED NOCS

THE 4TH INTERNATIONAL CONFERENCE ON ELECTRONIC DESIGN (ICED 2018)

2018 PROCEEDING NON-INDEX MAIN AUTHOR

27. COMPACT U-SHAPED SLOTTED ANTENNA WITH CONDUCTOR-BACKED PLANE FOR ULTRA-WIDEBAND (UWB) APPLICATIONS

3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING (ICEECC 2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

28. THE DESIGN EVALUATION OF AN INTERACTIVE QIRAAT MOBILE APPLICATION

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS CO-AUTHOR

29. CURRENT IMPLEMENTATION OF ADVANCE ENCRYPTION STANDARD (AES) S-BOX

JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES

2017 JOURNAL SCOPUS CO-AUTHOR

30. THE QURANIC PHILOSOPHY ON SUPERIORITY OF AUDIO SENSE AGAINST VISUAL SENSE BASED ON THE BOOK OF EXEGESIS AND SCIENCE REPORTS

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

31. A SYSTEMATIC REVIEW ON SEMANTIC-BASED ONTOLOGY FOR QURANIC KNOWLEDGE

INTERNATIONAL CONFERENCE ON INFORMATION SYSTEMS & SECURITY (ICOISS)

2017 PROCEEDING NON-INDEX CO-AUTHOR

32. FORMATIVE EVALUATION OF AN EDUCATIONAL MOBILE APPLICATION: AN INTERACTIVE MYQIRAAT APPLICATION

INTERNATIONAL CONFERENCE ON INFORMATION SYSTEMS & SECURITY (ICOISS)

2017 PROCEEDING NON-INDEX CO-AUTHOR

33. THE DESIGN EVALUATION OF AN INTERACTIVE QIRAAT MOBILE APPLICATION

WORLD INTERNATIONAL CONFERENCE ON ISLAMIC SCIENCES (WICOIS)

2016 PROCEEDING NON-INDEX CO-AUTHOR

34. INDUSTRIAL TRAINING HANDBOOK FOR ENGINEERING PROGRAM

2016 BOOK MAIN AUTHOR

35. SIMULTANEOUS OPTIMISATION OF TASK MAPPING AND PRIORITY ASSIGNMENT FOR REAL-TIME EMBEDDED NOCS

23RD EUROMICRO INTERNATIONAL CONFERENCE ON PARALLEL, DISTRIBUTED AND NETWORK-BASED PROCESSING

2015 PROCEEDING NON-INDEX MAIN AUTHOR

36. A FUNCTION FOR HARD REAL-TIME SYSTEM SEARCH-BASED TASK MAPPING OPTIMISATION

REAL-TIME DISTRIBUTED COMPUTING (ISORC), 2015 IEEE 18TH INTERNATIONAL SYMPOSIUM ON

2015 PROCEEDING NON-INDEX MAIN AUTHOR

37. A CONSTRUCTIVE TASK MAPPING ALGORITHM FOR HARD REAL-TIME EMBEDDED NOCS

IEEE CONFERENCE ON SYSTEM, PROCESS & CONTROL (ICSPC2015)

2015 PROCEEDING NON-INDEX MAIN AUTHOR

38. INEXACT END-TO-END RESPONSE TIME ANALYSIS AS FITNESS FUNCTION IN SEARCH-BASED TASK ALLOCATION HEURISTICS FOR HARD REAL-TIME NETWORK-ON-CHIPS

9TH INTERNATIONAL SYMPOSIUM ON RECONFIGURABLE AND COMMUNICATION-CENTRIC SYSTEMS-ON-CHIP (RECOSOC)

2014 PROCEEDING NON-INDEX CO-AUTHOR

39. FINGER VEIN MINUTIAE POINTS EXTRACTION BASED ON MAXIMUM CURVATURE POINTS IN IMAGE PROFILE AND FINGER PRINT APPLICATION METHODS

AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

2013 JOURNAL WOS CO-AUTHOR

40. AN OPTIMISATION ALGORITHM FOR MINIMISING ENERGY DISSIPATION IN NOC-BASED HARD REAL-TIME EMBEDDED SYSTEMS

21ST INTERNATIONAL CONFERENCE ON REAL-TIME NETWORKS AND SYSTEMS

2013 PROCEEDING NON-INDEX MAIN AUTHOR

41. REAL-TIME LOW-POWER TASK MAPPING IN NETWORKS-ON-CHIP

IEEE COMPUTER SOCIETY ANNUAL SYMPOSIUM ON VLSI (ISVLSI)

2013 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

42. COLOR IMAGE ENHANCEMENT USING CONTRAST STRETCHING ON A MOBILE DEVICE

INTERNATIONAL JOURNAL OF IMAGE PROCESSING AND VISUAL COMMUNICATION

2012 JOURNAL OTHER DATABASE CO-AUTHOR

43. THE IMPROVEMENT OF KEY MANAGEMENT BASED ON LOGICAL KEY HIERARCHY BY IMPLEMENTING DIFFIE HELLMAN ALGORITHM

JOURNAL OF EMERGING TRENDS IN COMPUTING AND INFORMATION SCIENCES

2012 JOURNAL OTHER DATABASE CO-AUTHOR

44. DESIGN OF IMPROVEMENT SECURE KEY MANAGEMENT IN MULTICAST COMMUNICATION

1ST AKEPT YOUNG RESEARCHERS CONFERENCE AND EXHIBITION

2011 PROCEEDING NON-INDEX CO-AUTHOR

45. A DESIGN OF GRID SUPPORTED SERVICES FOR MOBILE LEARNING SYSTEM

2ND INTERNATIONAL CONFERENCE ON COMPUTER RESEARCH AND DEVELOPMENT

2010 PROCEEDING NON-INDEX MAIN AUTHOR

46. EXPECTATION & EXPERIENCE OF ICT IN UNIVERSITY: A COMPARATIVE STUDY

18TH INTERNATIONAL CONFERENCE ON COMPUTERS IN EDUCATION

2010 PROCEEDING NON-INDEX MAIN AUTHOR

47. IMPROVING SOFTWARE MAINTENANCE PROCESS USING INTERRELATED SET FROM FOSS

3RD INTERNATIONAL CONFERENCE ON INFORMATICS AND TECHNOLOGY

2009 PROCEEDING NON-INDEX MAIN AUTHOR

CONSULTATION

1. INDKOM ENGINEERING ERP PROJECT

INDKOM ENGINEERING SDN. BHD.

2015 NATIONAL

AWARDS/RECOGNITION

1. ANUGERAH MAKALAH JURNAL TERBAIK FKAB 2025

2025 UNIVERSITY

2. ANUGERAH SUKAN DAN REKREASI

2024 UNIVERSITY

3. ANUGERAH BUKU ILMIAH TERBAIK

2024 UNIVERSITY

AWARDS/RECOGNITION

4. ANUGERAH PERKHIDMATAN SETIA

2024 UNIVERSITY

5. ANUGERAH BUKU ILMIAH TERBAIK

2024 UNIVERSITY

6. ANUGERAH STAF CONTOH DISEMBER 2023

2024 UNIVERSITY

7. SELF DIAGNOSIS ALGORITHMS: LEVERAGING MACHINE LEARNING FOR PERSONALIZED HEALTHCARE SOLUTIONS

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI SILVER

8. ANUGERAH IKON SUKAN FKAB

2023 UNIVERSITY

9. A NEW CRYPTOGRAPHY ALGORITHM DERIVED FROM QURANIC MAQAMAT FOR PREVENTING DIFFERENTIAL FAULT ANALYSIS

INNOVATION BANK CHALLENGE 2023 (IBC2023)

2023 UNIVERSITI SILVER

10. A METHOD OF COVER AUDIO SELECTION FOR EMBEDDING BASED ON VARIOUS CRITERIA

International Conference on Advances in Machine Intelligence and Cybersecurity Technologies (AMICT)

2023 ANTARABANGSA BEST PAPER AWARD

11. UTILIZING MULTI-CHARACTERISTIC-BASED COVER AUDIO SELECTION (MCAS) FOR SECURE COMMUNICATION

FINAL YEAR PROJECT & POSTGRADUATE: RESEARCH & INNOVATION POSTER COMPETITION (RIPC) SERIES 2/2022

2022 UNIVERSITI BRONZE

12. SMART BI-CAR

NATIONAL INNOVATION AND INVENTION COMPETITION 2022 (NIICE 2022)

2022 KEBANGSAAN SILVER

13. SMART BI-CAR

INTEGRATED DESIGN PROJECT SHORT VIDEO COMPETITION 2022

2022 KEBANGSAAN SILVER

14. COVER-SELECTION-BASED AUDIO STEGANOGRAPHY (CAS) BASED ON LEAST SIGNIFICANT BIT (LSB) FOR BALANCED PERFORMANCE

INNOVATION BANK CHALLENGE (IBC 2022)

2022 UNIVERSITI GOLD

15. VISITING SCHOLAR

MOHE INTEL ELITE INTERNSHIP PROGRAM

2021 INTERNATIONAL

AWARDS/RECOGNITION

16. COVID-19 BODY TEMPERATURE TRACKER: A MOBILE APPLICATION TO EASE MOVEMENT CONTROL ORDER

PERTANDINGAN REKACIPTA INOVASI NASIONAL (PRIN) 2021

2021 ANTARABANGSA BRONZE

17. CELSIUS TRACKER

INNOVATION BANK CHALLENGE (IBC 2021)

2021 UNIVERSITI BRONZE

18. PENCAPAIAN PRESTASI CEMERLANG TAHUN 2018

2019 UNIVERSITY

19. STUDY OF PERFOMANCES OF ANTENNA DESIGN FOR ULTRA-WIDEBAND APPLICATIONS

INVENTION, INNOVATION & DESIGN EXPOSITION 2019 (iidex2019)

2019 ANTARABANGSA BRONZE

20. ANUGERAH PERKHIDMATAN CEMERLANG 2017

2018 UNIVERSITY

21. PENCAPAIAN PRESTASI CEMERLANG TAHUN 2017

2018 UNIVERSITY

22. VISITING SCHOLAR

ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS (ICTP)

2018 INTERNATIONAL

23. STAF CONTOH SEPTEMBER 2017

2017 UNIVERSITY

24. THE K. M. STOTT PRIZE

2015 UNIVERSITY

25. MALAYSIAN GOVERNMENT SCHOLARSHIP AWARD

2011 NATIONAL

26. MALAYSIAN GOVERNMENT SCHOLARSHIP AWARD

2000 NATIONAL