

Profile Image

PROF. IR. DR. HAFIZAL BIN MOHAMAD

PENSYARAH UNIVERSITI GRED
KHAS C

CONTACT

Phone: 067986519

E-mail: hafizal@usim.edu.my

Faculty: Fakulti Kejuruteraan
Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 2

Master - Completed: 0, Ongoing: 1

AREAS OF EXPERTISE

ACADEMIC QUALIFICATION

PhD in Wireless Communications (2004)

Bachelor in Electronic (1998)

RESEARCH

1. AUTOMATED MACHINE LEARNING SYSTEM FOR INSTALLATION, OPERATION AND MAINTENANCE OF SOLAR PROJECTS USING SATELLITE AND DRONE IMAGERY

2025 GERAN KPT ON GOING MAIN RESEARCHER

2. INTELLIGENT DRONE NAVIGATION UNDER TREE CANOPY AND ITS DEEP LEARNING AIDED DATA POST-PROCESSING

2022 GERAN PENYELIDIKAN INDUSTRI ON GOING MAIN RESEARCHER

3. MOBILITY AND HANDOVER OPTIMIZATION FOR DEEP LEARNING ASSISTED ULTRA-DENSE 6G HETEROGENEOUS NETWORKS

2021 GERAN KPT ON GOING MAIN RESEARCHER

4. DESIGN AND DEVELOPMENT OF PERSONAL PROTECTIVE EQUIPMENT (PPE) BOX FOR HEALTHCARE APPLICATION

2020 GERAN PENYELIDIKAN COVID-19 COMPLETED MAIN RESEARCHER

PUBLICATION

1. QUANTIFYING THE AVAILABILITY OF TV WHITE SPACE FOR COGNITIVE RADIO IN MALAYSIA

7TH IEEE INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGIES, SIGNAL AND IMAGE PROCESSING (ATSIP 2024)

2024

PROCEEDING

SCOPUS

MAIN AUTHOR

2. ENHANCING BANDWIDTH AND GAIN OF CYLINDRICAL DIELECTRIC RESONATOR ANTENNA ARRAYS USING SUBSTRATE INTEGRATED WAVEGUIDE TECHNIQUE

2024 IEEE ASIA-PACIFIC CONFERENCE ON APPLIED ELECTROMAGNETICS (APACE 2024)

2024

PROCEEDING

SCOPUS

MAIN AUTHOR

3. PERFORMANCE ENHANCEMENT OF CDRA FOR 5G APPLICATIONS

INTERNATIONAL CONFERENCE ON ADVANCED TELECOMMUNICATION AND NETWORKING TECHNOLOGIES (ATNT 2024)

2024

PROCEEDING

NON-INDEX

MAIN AUTHOR

4. HANDOVER PERFORMANCE OF MOBILITY ROBUSTNESS OPTIMIZATION FOR BEYOND 5G NETWORKS (5G)

14TH IEEE SYMPOSIUM ON COMPUTER APPLICATIONS AND INDUSTRIAL ELECTRONICS (ISCAIE 2024)

2024

PROCEEDING

NON-INDEX

MAIN AUTHOR

5. IOT-BASED MONITORING SYSTEM FOR INDOOR AIR QUALITY USING THINGSBOARD

CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING (ICAEE 2024)

2024

PROCEEDING

NON-INDEX

MAIN AUTHOR

6. IOT BASED INDOOR AIR AND WATER QUALITY MONITORING SYSTEM USING NODE-RED

9TH INTERNATIONAL CONFERENCE ON COMPUTER AND COMMUNICATION ENGINEERING (ICCCCE 2023)

2023

PROCEEDING

SCOPUS

MAIN AUTHOR

7. HANDOVER MANAGEMENT OVER DUAL CONNECTIVITY IN 5G TECHNOLOGY WITH FUTURE ULTRA-DENSE MOBILE HETEROGENEOUS NETWORKS: A REVIEW

INTERNATIONAL JOURNAL ENGINEERING SCIENCE AND TECHNOLOGY

2022

JOURNAL

JCR

MAIN AUTHOR

8. TIME SERIES FORECASTING MODEL OF FUTURE SPECTRUM DEMANDS FOR MOBILE BROADBAND NETWORKS IN MALAYSIA, TURKEY, AND OMAN

AEJ - ALEXANDRIA ENGINEERING JOURNAL

2022

JOURNAL

SCOPUS

MAIN AUTHOR

9. OVERVIEW OF EVOLUTIONARY ALGORITHMS AND NEURAL NETWORKS FOR MODERN MOBILE COMMUNICATION

TRANSACTIONS ON EMERGING TELECOMMUNICATIONS TECHNOLOGIES

2022

JOURNAL

ISI

MAIN AUTHOR

10. CONFLICT RESOLUTION STRATEGY IN HANDOVER MANAGEMENT FOR 4G AND 5G NETWORKS

CMC-COMPUTERS MATERIALS & CONTINUA

2022

JOURNAL

ISI

MAIN AUTHOR

11. MOBILITY-AWARE OFFLOADING DECISION FOR MULTI-ACCESS EDGE COMPUTING IN 5G NETWORKS SENSORS

2022

JOURNAL

ISI

MAIN AUTHOR

12. HANDOVER MANAGEMENT FOR DRONES IN FUTURE MOBILE NETWORKS?A SURVEY SENSORS

2022

JOURNAL

ERA

MAIN AUTHOR

13. PEATLANDS MONITORING IN MALAYSIA WITH IOT SYSTEMS: PRELIMINARY EXPERIMENTAL RESULTS

COMPUTATIONAL INTELLIGENCE IN INFORMATION SYSTEMS

2021

CHAPTER IN BOOK

MAIN AUTHOR

PUBLICATION

14. A COMPREHENSIVE SURVEY ON MOBILITY MANAGEMENT IN 5G HETEROGENEOUS NETWORKS: ARCHITECTURES, CHALLENGES AND SOLUTIONS

IEEE ACCESS

2020

JOURNAL

ISI

MAIN AUTHOR

15. HYBRID NEAREST NEIGHBOUR AND FEED-FORWARD NEURAL NETWORKS ALGORITHM FOR INDOOR POSITIONING SYSTEM

2020 IEEE 8TH CONFERENCE ON SYSTEMS, PROCESS AND CONTROL (ICSPC)

2020

PROCEEDING

NON-INDEX

MAIN AUTHOR

AWARDS/RECOGNITION

1. AI-POWERED LEGAL FRAMEWORK FOR OPTIMIZING SUSTAINABLE HOUSEHOLD SOLID WASTE RECYCLING IN MALAYSIA

INTERNATIONAL GRAND INVENTION, INNOVATION, AND DESIGN EXPO (IGIIDeation) 2025, IIUM

2025

ANTARABANGSA

SILVER

2. STAF CONTOH FKAB

2023

UNIVERSITY

3. ACADEMIC ADVISOR

UNIVERSITI KUALA LUMPUR KAMPUS CAWANGAN MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY (UNIKL - MIIT)

2022

NATIONAL

4. ACADEMIC ADVISOR

FAKULTI KEJURUTERAAN ELEKTRONIK DAN KEJURUTERAAN KOMPUTER (FKEKK), UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTEM)

2022

NATIONAL

5. E-PROSUMER: SMART PRECISION FERTIGATION SYSTEM

Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (PECIPTA22)

2022

ANTARABANGSA

SILVER