



**DR. FAUZUN BINTI
ABDULLAH ASUHAIMI**

PENSYARAH UNIVERSITI DS13

CONTACT

Phone: 067988000

E-mail: fauzun@usim.edu.my

Faculty: Fakulti Kejuruteraan
Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 1

Master - Completed: 1, Ongoing: 0

AREAS OF EXPERTISE

Other Communications Engineering

Artificial Intelligence

Radio Frequency And Wireless Systems

Communication Services (including Of Broadcasting, Postal

Communication, Tele-education, Tele-working, Multiservice

Convergence Network, 3g Cellular Networks, Internet Protocol,

Short-range Communivati

ACADEMIC QUALIFICATION

PhD in Electronics And Electrical Engineering (2019)

Master in Electrical - Electronics And Telecommunications
(2014)

Bachelor in Communication Engineering (2012)

RESEARCH

1. A NOVEL WATER QUALITY ANOMALIES SENSING AND
FORECASTING METHOD USING TIME SERIES REGRESSION
FOREST (TSRF) FOR SUSTAINABLE MODERN AGRICULTURE.

2024

GERAN KPT

ON GOING

CO-RESEARCHER

2. TAARIQ: DESIGN AND DEVELOPMENT OF AN AL-BASED
HUMANOID ROBOT

2023

GERAN PENYELIDIKAN KHAS

ON GOING

CO-RESEARCHER

3. DEVELOPMENT AND APPLICATION OF LSTM AND GRU
METHODS TO RECOGNIZE HAND MOVEMENTS, POSE AND FACE
BASED ON REAL-TIME INTERPRETATION OF INDONESIAN -
MALAYSIA SIGN LANGUAGE

2023

GERAN ANTARABANGSA

ON GOING

CO-RESEARCHER

4. RESOURCE MANAGEMENT OPTIMIZATION IN 6G NETWORK FOR
SMART GRID COMMUNICATIONS USING DEEP LEARNING

2022

GERAN PENYELIDIKAN USIM

ON GOING

MAIN RESEARCHER

5. TAARIQ: AUTONOMOUS PERSON-FOLLOWING TELEPRESENCE
ROBOT USING STEREO CAMERA AND DEEP LEARNING YOLO

2022

GERAN PENYELIDIKAN USIM

ON GOING

CO-RESEARCHER

RESEARCH

6. DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID WONDERS - KINDERS"

2022

GERAN PENYELIDIKAN AGENSI KERAJAAN

COMPLETED

CO-RESEARCHER

7. INVARIANT KALMAN FILTERING FOR LOW-COST PEDESTRIAN NAVIGATION SYSTEM

2021

GERAN PENYELIDIKAN USIM

ON GOING

CO-RESEARCHER

8. AUTONOMOUS HUMAN DETECTION AND LOCALIZATION USING MACHINE LEARNING

2021

GERAN KPT (KKP)

COMPLETED

CO-RESEARCHER

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

2021

GERAN KPT

ON GOING

CO-RESEARCHER

PUBLICATION

1. PERFORMANCE EVALUATION OF NATURAL ESTER OILS AS SUSTAINABLE DIELECTRIC FLUIDS FOR TRANSFORMERS: AI ENHANCED STATISTICAL ANALYSIS

IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION

2024 JOURNAL ERA CO-AUTHOR

2. DELAY OPTIMIZATION OF WI-FI MESH IN NEIGHBOURHOOD AREA NETWORK USING DEEP REINFORCEMENT LEARNING

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

2024 PROCEEDING SCOPUS CORRESPONDING AUTHOR

3. ENERGY EFFICIENCY OPTIMIZATION IN HETNETS FOR SMART GRID WIDE AREA NETWORK USING DEEP REINFORCEMENT LEARNING

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

2024 PROCEEDING SCOPUS CORRESPONDING AUTHOR

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

2024 IEEE 14TH SYMPOSIUM ON COMPUTER APPLICATIONS & INDUSTRIAL ELECTRONICS

2024 PROCEEDING SCOPUS CO-AUTHOR

5. OPTIMIZATIONS OF IOT-EDGE COMPUTING IN SMART GRID WIDE AREA NETWORK.

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK MAIN AUTHOR

6. HANDOVER PARAMETER FOR SELF-OPTIMISATION IN 6G MOBILE NETWORKS: A SURVEY

AEJ - ALEXANDRIA ENGINEERING JOURNAL

2023 JOURNAL SCOPUS CO-AUTHOR

7. DURIAN DETECTION AND COUNTING SYSTEM USING DEEP LEARNING

JOURNAL OF ENGINEERING SCIENCE AND TECHNOLOGY

2023 JOURNAL ERA MAIN AUTHOR

8. ENERGY EFFICIENCY OF IOT-EDGE COMPUTING IN SMART GRID USING DEEP REINFORCEMENT LEARNING

2023 IEEE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN ENGINEERING AND TECHNOLOGY (IICAIET)

2023 PROCEEDING WOS CORRESPONDING AUTHOR

9. DELAY OPTIMIZATION OF IOT-EDGE COMPUTING IN SMART GRID USING DEEP REINFORCEMENT LEARNING

2023 IEEE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN ENGINEERING AND TECHNOLOGY (IICAIET)

2023 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

10. TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 BOOK CO-EDITOR

11. CONTROL SYSTEM IN FLUID DIFFERENTIATION AND NATURAL GAS COMPRESSOR SECTORS

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK CO-AUTHOR

12. ENERGY EFFICIENCY MILLIMETER-WAVE COMMUNICATIONS FOR FLOATING PHOTOVOLTAIC IN SMART GRID

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK MAIN AUTHOR

13. ENERGY EFFICIENT SCHEDULING IN SMART HOME USING DEEP REINFORCEMENT LEARNING

2022 IEEE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN ENGINEERING AND TECHNOLOGY (IICAIET)

2022 PROCEEDING SCOPUS MAIN AUTHOR

PUBLICATION

14. RESOURCE ALLOCATION SCHEDULING FOR DELAY OPTIMIZATION IN 6G TERAHERTZ COMMUNICATION USING DEEP REINFORCEMENT LEARNING

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2022

2022 PROCEEDING NON-INDEX MAIN AUTHOR

15. RUBY STONE LIGHT GRADE INSPECTION SYSTEM USING CCD LINEAR SENSOR ? A REVIEW

JOURNAL OF PHYSICS: CONFERENCE SERIES

2022 PROCEEDING NON-INDEX CO-AUTHOR

16. TOMOGRAPHY SYSTEM TOWARDS THE INDUSTRIAL REVOLUTION 4.0

JOURNAL OF TOMOGRAPHY SYSTEM & SENSORS APPLICATION

2021 JOURNAL OTHER DATABASE CO-AUTHOR

17. AN ILLEGAL DUMPING DETECTION SYSTEM BASED ON IMAGE PROCESSING IN OPENALPR

ASM SCIENCE JOURNAL

2021 JOURNAL SCOPUS CO-AUTHOR

18. DELAY-AWARE 5G MILLIMETER-WAVE CELLULAR NETWORKS

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2021 (SAIS 2021)

2021 PROCEEDING NON-INDEX CO-AUTHOR

19. UTILITY FUNCTION BASED RESOURCE BLOCK SCHEDULING IN WIRELESS NETWORKS

2021 26TH IEEE ASIA-PACIFIC CONFERENCE ON COMMUNICATIONS (APCC)

2021 PROCEEDING NON-INDEX CO-AUTHOR

20. VIDEO TRANSMISSION IN IEEE 802.15.4 WIRELESS SENSOR NETWORK USING ASYNCHRONOUS TDMA

2021 INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING & COMPUTER SYSTEMS AND 4TH INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE AND INFORMATION MANAGEMENT (ICSECS-ICOCSIM)

2021 PROCEEDING NON-INDEX CO-AUTHOR

21. ADVANCES IN SUSTAINABLE LIVING - ENGINEERING AND TECHNOLOGY

2021 BOOK CO-EDITOR

22. ENERGY EFFICIENT DEVICE-TO-DEVICE COMMUNICATIONS UNDERLAYING CELLULAR NETWORKS FOR SMART GRID NEIGHBOURHOOD AREA NETWORKS

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK MAIN AUTHOR

23. ANALYSIS OF CURRENT-VOLTAGE CHARACTERISTICS ASSOCIATED TO THE QUANTUM STRUCTURE OF ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT): A PROMISING TERAHERTZ DEVICES

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

24. DRIVER BEHAVIOUR MONITORING AND ALERT SYSTEM BY USING MACHINE LEARNING

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS 2020)

2020 PROCEEDING NON-INDEX CO-AUTHOR

25. DELAY-AWARE ENERGY-EFFICIENT JOINT POWER CONTROL AND MODE SELECTION IN DEVICE-TO-DEVICE COMMUNICATIONS FOR FREEDM SYSTEMS IN SMART GRIDS

IEEE ACCESS

2019 JOURNAL ISI MAIN AUTHOR

26. CHANNEL ACCESS AND POWER CONTROL FOR ENERGY- EFFICIENT DELAY-AWARE HETEROGENEOUS CELLULAR NETWORKS FOR SMART GRID COMMUNICATIONS USING DEEP REINFORCEMENT LEARNING

IEEE ACCESS

2019 JOURNAL SCOPUS MAIN AUTHOR

PUBLICATION

27. JOINT RESOURCE ALLOCATION AND POWER CONTROL IN HETEROGENEOUS CELLULAR NETWORKS FOR SMART GRIDS

IEEE GLOBECOM 2018

2018

PROCEEDING

NON-INDEX

MAIN AUTHOR

28. DELAY-OPTIMAL RELAY SELECTION IN DEVICE-TO-DEVICE COMMUNICATIONS FOR SMART GRID

2017 IEEE INTERNATIONAL CONFERENCE ON SMART GRID COMMUNICATIONS (SMARTGRIDCOMM)

2017

PROCEEDING

NON-INDEX

MAIN AUTHOR

AWARDS/RECOGNITION

1. STAFF CONTOH BULANAN

2024 UNIVERSITY

2. ANUGERAH E-PEMBELAJARAN

2024 UNIVERSITY

3. ACADEMIC ADVISOR

AI SINGAPORE

2024 INTERNATIONAL

4. ANUGERAH KARYA SUNTINGAN TERBAIK

2023 NATIONAL

5. DELAY AND ENERGY EFFICIENCY OF IOT-EDGE COMPUTING IN SMART GRID WAN

INNOVATION BANK CHALLENGE 2023 (IBC2023)

2023 UNIVERSITI SILVER

6. STAF CONTOH BULANAN

2022 UNIVERSITY

7. SMART PARCEL DROP BOX

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022 ANTARABANGSA SILVER

8. E-PROSUMER: SMART PRECISION FERTIGATION SYSTEM

Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (PECIPTA22)

2022 ANTARABANGSA SILVER