



**DR. NOR RAIHAN BINTI  
ZULKEFLY**

PENSYARAH UNIVERSITI DS13

**CONTACT**

**Phone:** 80135

**E-mail:**

n.raihan@usim.edu.my

**Faculty:** Kolej Permata Insan

**SUPERVISION**

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0, Ongoing: 0

**AREAS OF EXPERTISE**

Wave Phenomena And Propagation

Electronic, Electrical, Magnetic And Optical Properties

High Speed Network

Physical Sciences

Applied Physics

**BIOGRAPHY**

A lecturer from Kolej Permata Insan. Holds a Phd in Electrical Engineering.

**ACADEMIC QUALIFICATION**

Phd in Electrical Engineering (2018)

Master in Communication & Computer (2013)

Bachelor in Engineering Technology In Data Communications (2011)

**RESEARCH**

**1. WIRELESS SIGNAL CHARACTERIZATION FOR DYNAMIC ASSET  
TRACKING IN INDUSTRIAL FACILITIES**

2019 GERAN SEPADAN AGENSI KERAJAAN COMPLETED MAIN  
RESEARCHER

# PUBLICATION

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## 1. PATH LOSS MODELS FOR 5G COMMUNICATIONS SYSTEM IN CORRIDORS ENVIRONMENT

JOURNAL OF ADVANCED RESEARCH

2024 JOURNAL SCOPUS MAIN AUTHOR

## 2. MYSEISMO : EARTHQUAKE DETECTION AND MONITORING SYSTEM (MICROBIT SEISMIC AND METEOROLOGICAL STATION)

IJURECON 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

## 3. ADVANCEMENTS IN PIEZOELECTRIC ENERGY HARVESTING : INNOVATION IN CHARGING SHOES

IJURECON 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

## 4. NEW PACEMAKER DETECTOR USING MICRO BIT PROTOTYPE

IJURECON 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

## 5. NOMA SOLUTION TECHNIQUE IN 5G SYSTEM

MULTIMEDIA UNIVERSITY ENGINEERING CONFERENCE

2024 PROCEEDING WOS MAIN AUTHOR

## 6. COVERAGE-BASED LOCATION FOR 5G BASE STATION

MULTIMEDIA UNIVERSITY ENGINEERING CONFERENCE 2023 (MECON2023)

2024 PROCEEDING NON-INDEX MAIN AUTHOR

## 7. PROJEK PERKHIDMATAN LATIHAN KEMAHIRAN DAN KEPAKARAN BAGI PELAKSANAAN BPRV PENGURUSAN PELAJAR KPM

2024 POLICY

## 8. PENYELARASAN SISTEM MOEIS, PAJSK DAN IDME SERTA PELAN PERSEDIAAN PRA-UNIVERSITI DAN LALUAN PENDIDIKAN PELAJAR PINTAR CERDAS UNTUK PROGRAM PERMATA@PINTAR NEGARA DAN PROGRAM PERMATA INSAN

2024 POLICY

## 9. BUKU DISIPLIN PELAJAR

2024 POLICY

## 10. POLISI PENGGUNAAN MODEM, ROUTER, SWITCH ATAU HUB UNTUK TUJUAN SAMBUNGAN KE INTERNET DI KOLEJ PERMATA INSAN DAN USIM

2024 POLICY

## 11. THE EFFECT OF EMOTIONAL INTELLIGENCE ON COLLEGE ADJUSTMENT AMONG FOUNDATION 1 AND FOUNDATION 2 KOLEJ PERMATA INSAN STUDENTS

INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2023 (IJURECON 2023)

2023 PROCEEDING OTHER DATABASE MAIN AUTHOR

## 12. HANDOVER SELF-OPTIMIZATION IN DRONES BASED ON LOW EARTH ORBIT SATELLITE SYSTEMS

10TH INTERNATIONAL CONFERENCE ON WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (WINCOM 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

## 13. MOBILITY MANAGEMENT IN SATELLITE SYSTEMS: A SURVEY STUDY

10TH INTERNATIONAL CONFERENCE ON WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (WINCOM 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

## PUBLICATION

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### 14. SURVEY STUDY ON HANDOVER MANAGEMENT IN SATELLITE SYSTEMS

THE 10TH INTERNATIONAL CONFERENCE ON WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (WINCOM 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

### 15. AN OVERVIEW OF HANDOVER MANAGEMENT IN LOW EARTH ORBIT (LEO)

10TH INTERNATIONAL CONFERENCE ON WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (WINCOM 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

### 16. SPECTRUM SHARING TO BUILD 5G NETWORKS: A SURVEY

10TH INTERNATIONAL CONFERENCE ON WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (WINCOM 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

### 17. DESIGN AND FABRICATION OF AN ECO-FRIENDLY PORTABLE COOKER

INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2023 (IJURECON 2023)

2023 PROCEEDING OTHER DATABASE MAIN AUTHOR

### 18. SURVEY STUDY ON SPECTRUM SHARING TO BUILD 5G NETWORKS

10TH INTERNATIONAL CONFERENCE ON WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (WINCOM 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

### 19. REVIEW ON NOMA SOLUTION TECHNIQUE IN 5G SYSTEM

THE MULTIMEDIA UNIVERSITY ENGINEERING CONFERENCE 2023 (MECON 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

### 20. LIGHT-RAIL-TRANSIT SANITATION SYSTEM

INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2023 (IJURECON 2023)

2023 PROCEEDING OTHER DATABASE MAIN AUTHOR

### 21. 1. DESIGN & FABRICATION OF ECO-FRIENDLY PORTABLE COOKER

IJURECON 2023

2023 PROCEEDING OTHER DATABASE MAIN AUTHOR

### 22. PENCAPAIAN STEM DI KALANGAN MURID PINTAR BERBAKAT MELALUI INTERAKSI RAKAN SEBAYA DAN STRATEGI PEMBELAJARAN

4TH INTERNATIONAL CONFERENCE ON BUSINESS, ECONOMY, EDUCATION, ENGINEERING, INTER-DISCIPLINARY, TECHNOLOGY AND SOCIAL SCIENCES (ICEBTS22)

2022 PROCEEDING NON-INDEX MAIN AUTHOR

### 23. PALLETIZED NATURAL ZEOLITE WITH HIGH POROSITY TO ADSORB METHYLENE BLUE FOR WATER POLLUTION RECOVERY

INNOVATION COMPETITION AND EXHIBITION 2022 (INCEX 2022) PERINGKAT KEBANGSAAN

2022 PROCEEDING NON-INDEX MAIN AUTHOR

### 24. A CASE STUDY ON PARENT'S SENSITIVITY TO ADHD AND NEURODIVERSITY AMONG HIGH SCHOOL STUDENTS AT KOLEJ GENIUS INSAN

IJURECON 2022

2022 PROCEEDING NON-INDEX MAIN AUTHOR

### 25. OIL PALM FROND BRIQUETTING AS BIO-CHARCOAL FOR RENEWABLE ENERGY

IJURECON 2022

2022 PROCEEDING NON-INDEX MAIN AUTHOR

### 26. FIZIK

MODUL PENGAJARAN DAN PEMBELAJARAN SERTA PENTAKSIRAN BERSEPADU KURIKULUM PENDIDIKAN PINTAR BERBAKAT, INTEGRASI NAQLI DAN AQLI (IGED), ASAS 1

2022 CHAPTER IN BOOK MAIN AUTHOR

## PUBLICATION

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### 27. GARIS PANDUAN PENGURUSAN WABAK DAN PENYAKIT BERJANGKIT KOLEJ GENIUS INSAN

2021 POLICY

### 28. GARIS PANDUAN PENYERTAAN PERTANDINGAN

2021 POLICY

### 29. GARIS PANDUAN MURID BALIK BERMALAM

2021 POLICY

### 30. 6.5 GHZ AND 10.2 GHZ PATH LOSS MEASUREMENTS AND MODELING FOR 5G COMMUNICATIONS SYSTEM PREDICTION

INTERNATIONAL JOURNAL OF RESEARCH IN ENGINEERING AND TECHNOLOGY

2017 JOURNAL SCOPUS MAIN AUTHOR

### 31. MULTI-FREQUENCIES PENETRATION LOSS AND MODELING AT 6.5 GHZ TO 38 GHZ FOR 5G COMMUNICATIONS SYSTEM EVALUATION

INTERNATIONAL JOURNAL OF RESEARCH IN ENGINEERING AND TECHNOLOGY

2017 JOURNAL SCOPUS MAIN AUTHOR

### 32. 4G CHANNEL CHARACTERIZATION FOR INDOOR ENVIRONMENT AT 2.6 GH

IEEE COLLOQUIUM ON SIGNAL PROCESSING AND ITS APPLICATIONS

2015 PROCEEDING NON-INDEX MAIN AUTHOR

### 33. CHANNEL CHARACTERIZATION FOR INDOOR ENVIRONMENT AT 17 GHZ FOR 5G COMMUNICATIONS

MICC

2015 PROCEEDING NON-INDEX MAIN AUTHOR

### 34. INDOOR PATH LOSS MODEL FOR 4G WIRELESS NETWORK AT 2.6 GHZ

TAFGEN

2015 PROCEEDING NON-INDEX MAIN AUTHOR

### 35. INDOOR PATH LOSS MODEL FOR 4G WIRELESS NETWORK AT 2.6 GHZ

TAFGEN

2015 PROCEEDING NON-INDEX MAIN AUTHOR

### 36. PATH LOSS MODEL FOR LTE BAND IN OUTDOOR ENVIRONMENT

IICIST

2015 PROCEEDING NON-INDEX MAIN AUTHOR

## CONSULTATION

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### 1. EDUCATION OLIMPIAD

KPM

2022

INTERNATIONAL

### 2. PENDIDIKAN /KEJURUTERAAN

USM

2022

NATIONAL

### 3. WIRELESS COMMUNICATION FOR 5G TECHNOLOGY

KEMENTERIAN PENGAJIAN TINGGI

2021

NATIONAL

### 4. INTERNATIONAL OLYMPIAD FOR EARTH SCIENCE

KOLEJ GENIUS INSAN BAHAGIAN GENIUS KPM

2019

NATIONAL

### 5. JAWATANKUASA PELAKSANA MUKHAYYAM AL-ABRAR 2019

KOLEJ GENIUS INSAN

2019

NATIONAL

## AWARDS/RECOGNITION

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### 1. ANUGERAH PENULIS ARTIKEL CEMERLANG

2024

UNIVERSITY

### 2. ANUGERAH PERKHIDMATAN CEMERLANG 2023

2024

UNIVERSITY

### 3. ANUGERAH PENILAI BERKUALITI

2024

UNIVERSITY

### 4. ANUGERAH PENILAI BERKUALITI

2024

UNIVERSITY

### 5. ANUGERAH PENILAI BERKUALITI

2024

UNIVERSITY