



**PROF. MADYA IR. DR.  
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Kejuruteraan Dan Alam Bina

**SUPERVISION**

PhD - Completed: 8, Ongoing: 0

Master - Completed: 2, Ongoing: 0

**AREAS OF EXPERTISE**

Navigation And Positioning System

Satellite Geodesy And Positioning

Digital Image Processing Algorithm And Techniques

**BIOGRAPHY**

A lecturer from Fakulti Kejuruteraan Dan Alam Bina. Holds a Phd in Kejuruteraan.

**ACADEMIC QUALIFICATION**

Phd in Kejuruteraan (2012)

Master in Kejuruteraan (2007)

Bachelor in Kejuruteraan (2001)

**RESEARCH**

**1. QURANIC SIGN LANGUAGE DETECTION SYSTEM USING LSTM NEURAL NETWORK**

2024 ON GOING MAIN RESEARCHER

**2. INVARIANT KALMAN FILTERING FOR LOW-COST PEDESTRIAN NAVIGATION SYSTEM**

2021 ON GOING MAIN RESEARCHER

**3. NEW MOTION SEGMENTATION FOR VEHICLES IN URBAN TRAFFIC SCENES**

2018 COMPLETED MAIN RESEARCHER

**4. A FORMULATION OF AN ENHANCED AIRLIGHT DETECTION ALGORITHM FOR OUTDOOR IMAGES**

2013 COMPLETED MAIN RESEARCHER

**5. AUTOMATIC IMAGE ENHANCEMENT TOOL FOR POOR VISIBILITY OUTDOOR IMAGES**

2013 COMPLETED MAIN RESEARCHER

## 6. EVALUATING NETWORK PERFORMANCE OF DEDICATED WIFI ROUTERS

2013

COMPLETED

MAIN RESEARCHER

# PUBLICATION

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## 1. INDOOR POSITIONING SYSTEMS: TECHNOLOGIES AND SELECTION STRATEGIES

2025 JOURNAL

## 2. QURANIC SIGN LANGUAGE RECOGNITION: CHALLENGES AND FUTURE DIRECTIONS FOR EDGE-AWARE SYSTEMS

2025 PROCEEDING

## 3. INVARIANT EXTENDED KALMAN FILTER FOR LOW-COST FOOT-MOUNTED INERTIAL PEDESTRIAN NAVIGATION

2024 PROCEEDING

## 4. FROM MELAKA TO NOTTINGHAM

2024 CHAPTER IN BOOK

## 5. A USER REQUIREMENT STUDY TOWARDS THE DEVELOPMENT OF AN INTEGRATED GRADUATE PORTAL (IGP) FOR GRADUATE MARKETABILITY

2017 PROCEEDING

## 6. DEVELOPMENT OF INTEGRATED GRADUATE PORTAL (IGP) FOR GRADUATE MARKETABILITY

2017 PROCEEDING

## 7. TEST

2017 POLICY

## 8. ROTATING A MEMS INERTIAL MEASUREMENT UNIT FOR A FOOT MOUNTED PEDESTRIAN NAVIGATION

2015 JOURNAL

## 9. ON MAGNETOMETER HEADING UPDATES FOR INERTIAL PEDESTRIAN NAVIGATION.

2014 JOURNAL

## 10. INCREASED ERROR OBSERVABILITY OF AN INERTIAL PEDESTRIAN NAVIGATION SYSTEM BY ROTATING IMU.

2014 JOURNAL

## 11. UNDERSTANDING THE PERFORMANCE OF ZERO VELOCITY UPDATES IN MEMS-BASED PEDESTRIAN NAVIGATION.

2014 JOURNAL

## 12. ROTATING MEMS IMU FOR PEDESTRIAN NAVIGATION

2013 PROCEEDING

## 13. USING CONSTRAINTS FOR SHOE MOUNTED INDOOR PEDESTRIAN NAVIGATION

2012 JOURNAL

## 14. AIDING LOW COST INERTIAL NAVIGATION WITH BUILDING HEADING FOR PEDESTRIAN NAVIGATION

2011 JOURNAL

## 15. INTEGRATING LOW COST IMU WITH BUILDING HEADING IN INDOOR PEDESTRIAN NAVIGATION

2011 JOURNAL

## 16. INVESTIGATING THE EFFECT OF ROTATING MEMS IMU FOR PEDESTRIAN NAVIGATION

2011 PROCEEDING

#### 17. AIDING MEMS IMU WITH BUILDING HEADING FOR INDOOR PEDESTRIAN NAVIGATION

2010 PROCEEDING

#### 18. PEDESTRIAN NAVIGATION WITH HEADING DRIFT CORRECTION

2010 PROCEEDING

#### 19. LOW-COST, HIGH ACCURACY POSITIONING FOR INDOOR NAVIGATION

2010 PROCEEDING

#### 20. SATELLITE LINK MARGIN PREDICTION AND PERFORMANCE OF ASTRO MALAYSIA

2009 PROCEEDING

## CONSULTATION/ADULATION

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#### 1. TECHNICAL CONSULTANT FOR PREDICTIVE AND CORRECTIVE MAINTENANCE PROJECT, TRUCK MONITORING SYSTEM

2021 NATIONAL JHC LOGISTICS

#### 2. PERKHIDMATAN KONSULTANSI MEMBANGUNKAN PROGRAM SARJANA MUDA SAINS SENIBINA DENGAN KEPUJIAN KOLEJ UNIVERSITI YAYASAN SABAH (UCSF)

National KOLEJ UNIVERSITI YAYASAN SABAH (UCSF)

## AWARDS/RECOGNITION

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#### 1. ANUGERAH KHAS FKAB JA'IZAH AL KHASSAH

2025 OTHERS

#### 2. CONFERENCE PAPER REVIEWER

2025 INTERNATIONAL

#### 3. ARTIFICIAL INTELLIGENCE APPLICATIONS FOR CCS PIPELINE INTEGRITY MONITORING

2025 Antarabangsa Silver

#### 4. ANUGERAH PERKHIDMATAN CEMERLANG 2023

2024 UNIVERSITY

#### 5. ACADEMIC ADVISOR

2024 UNIVERSITY