PROF. MADYA IR. TS. DR. **JULIZA BINTI JAMALUDIN**

PENSYARAH UNIVERSITI DS14

CONTACT

Phone: 067988498

E-mail: juliza@usim.edu.my Faculty: Fakulti Kejuruteraan

Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 2 Master - Completed: 3, Ongoing: 4

AREAS OF EXPERTISE

Tomography

Image Processing And Computer Vision

Control Engineering

Instrumentation And Control

Mechatronics

Instrumentation, Measurement Techniques And Metrology

Standards And Calibration

Sensors

ACADEMIC QUALIFICATION

PhD in Kejuruteraan Elektrik (2016)

Master in Kejuruteraan Elektrik- Mekatronik Dan Kawlan Automatik (2013)

Bachelor in Kejuruteraan Elektrik- Kawalan Dan Instrumentasi (2008)

RESEARCH

1. INVESTIGATING THE POTENTIAL OF PORTABLE WATER **QUALITY INSPECTION SYSTEM INTEGRATED WITH TF MINI-S** LIDAR AND IOT MONITORING SYSTEM

2024 GERAN ANTARABANGSA ON GOING MAIN RESEARCHER

2. SALAH CHAIR

2023 GERAN PENYELIDIKAN LAB2MARKET ON GOING MAIN

3. DEVELOPMENT OF UPPER LIMB EXOSKELETON SYSTEM

2023 GERAN PEMBANGUNAN INOVASI (GPI) ON GOING MAIN

4. DEVELOPMENT OF MOBILE APPLICATION FOR WOMEN'S "PRELOVED" BUSINESS PLATFORM: FASHION ARCHADE (FACADE)

2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED MAIN

5. CONCEPTUAL MODELLING OF DUAL-MODE TOMOGRAPHY TECHNIQUE FOR DENTAL DIAGNOSTICS BASED ON ULTRASOUND AND LIGHT PROPAGATION ANALYSIS.

2022 GERAN PENYELIDIKAN USIM ON GOING MAIN RESEARCHER

RESEARCH

6. A CONCEPTUAL MODELLING OF QUANTITATIVE GRADING VALUATION OF RUBY STONE VIA USING CHARGE-COUPLED DEVICE (CCD) TOMOGRAPHY APPROACH

2020 GERAN KPT COMPLETED MAIN RESEARCHER

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

2018 GERAN PENYELIDIKAN USIM COMPLETED MAIN RESEARCHER

PUBLICATION

1. ONLINE SIMULATION TO MONITOR MULTIPHASE FLOW USING LASER SOURCE AS TRANSMITTER OPTIK-INTERNATIONAL JOURNAL FOR LIGHT AND ELECTRON OPTICS 2021 JOURNAL ISI, SCOPUS AND ERA MAIN AUTHOR 2. AN APPLICATION OF CHARGE-COUPLED DEVICE (CCD) TOMOGRAPHY SYSTEM FOR GEMOLOGICAL INDUSTRY - A INNOVATIVE MANUFACTURING, MECHATRONICS AND MATERIALS FORUM 2021 2021 PROCEEDING NON-INDEX MAIN AUTHOR 3. THE DEVELOPMENT OF SALAH CHAIR USING ELECTRONIC SENSOR TO ASSIST DISABLED MUSLIMS IN PERFORMING **PRAYERS** REKA ELKOMIKA: JURNAL PENGABDIAN KEPADA MASYARAKAT 2020 JOURNAL OTHER DATABASE MAIN AUTHOR 4. A STUDY OF OBJECT TRANSPARENCY VIA CHARGE-COUPLED DEVICE MATHEMATICAL MODELLING ASSESSMENT MALAYSIAN JOURNAL OF SCIENCE HEALTH & TECHNOLOGY 2020 JOURNAL OTHERS DATABASE MAIN AUTHOR 5. CCD OPTICAL TOMOGRAPHY SYSTEM TO DETECT SOLID CONTAMINATION IN CRYSTAL-CLEAR WATER IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS 2020 JOURNAL SCOPUS MAIN AUTHOR 6. CYBER-PHYSICAL SYSTEM (CPS) APPLICATION_A REVIEW REKA ELKOMIKA: JURNAL PENGABDIAN KEPADA MASYARAKAT 2020 JOURNAL OTHER DATABASE MAIN AUTHOR 7. A STUDY ON EARLY DETECTION OF SEWER PIPELINE BLOCKAGE USING CCD TOMOGRAPHY APPROACH IOP CONFERENCE SERIES: EARTH AND ENVIRONMENTAL SCIENCE, 3RD INTERNATIONAL CONFERENCE ON CIVIL AND **ENVIRONMENTAL ENGINEERING 18 NOVEMBER 2020** 2020 PROCEEDING NON-INDEX MAIN AUTHOR 8. CHARGE-COUPLED DEVICE OPTICAL TOMOGRAPHY SYSTEM FOR AIR BUBBLES DETECTION 2020 BOOK MAIN AUTHOR 9. DEVICES IN OPTICS, TOMOGRAPHY AND BIOSENSING ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & BUILT ENVIRONMENT 2019 CHAPTER IN BOOK MAIN AUTHOR 10. STATISTICAL ANALYSES IN VALIDATING THE PERFORMANCE OF OPTICAL TOMOGRAPHY SYSTEM IN MEASURING **OBJECT DIAMETER** EMERGING THEMES IN FUNDAMENTAL AND APPLIED SCIENCES 2019 CHAPTER IN BOOK MAIN AUTHOR 11. OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE FOR TRANSPARENT OBJECT DETECTION INTERNATIONAL JOURNAL OF INTEGRATED ENGINEERING 2018 JOURNAL SCOPUS MAIN AUTHOR 12. ANALYSIS ON THE EFFECT OF SENSOR VIEWS IN IMAGE RECONSTRUCTION PRODUCED BY OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE IEEE TRANSACTIONS ON IMAGE PROCESSING 2018 JOURNAL WOS MAIN AUTHOR 13. TOMOGRAPHY VALIDATION METHOD THROUGH STATISTICAL ANALYSIS OF VARIANCE TECHNIQUE

SYMPOSIUM ON INSTRUMENTATION AND SENSING TECHNOLOGY (SOINSET) 2018

2018 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

14. CYBER-PHYSICAL SYSTEM (CPS): STATE OF THE ART

IEEE ICE CUBE 2018: INTERNATIONAL CONFERENCE ON COMPUTING, ELECTRONIC AND ELECTRICAL ENGINEERING

2018 PROCEEDING NON-INDEX MAIN AUTHOR

15. CHARGE-COUPLED DEVICE BASED ON OPTICAL TOMOGRAPHY SYSTEM FOR MONITORING TWO-PHASE FLOW ELECTRONIC LETTERS

2017 JOURNAL WOS MAIN AUTHOR

16. CHARGE-COUPLED DEVICE BASED ON OPTICAL TOMOGRAPHY SYSTEM FOR MONITORING MULTIPHASE FLOW INTERNATIONAL JOURNAL OF INTEGRATED ENGINEERING

2017 JOURNAL SCOPUS MAIN AUTHOR

17. CHARGE-COUPLED DEVICE BASED ON OPTICAL TOMOGRAPHY SYSTEM IN DETECTING SOLID AND TRANSPARENT OBJECTS IN NON-FLOWING CRYSTAL CLEAR WATER.

INTERNATIONAL JOURNAL OF LIGHT AND ELECTRON OPTIC, ELSEVIER

2017 JOURNAL WOS MAIN AUTHOR

18. IMAGE RECONSTRUCTION MODELLING FOR OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE (CCD) LINEAR SENSOR

THE 3RD PUTRAJAYA INTERNATIONAL BUILT ENVIRONMENT, TECHNOLOGY AND ENGINEERING CONFERENCE 2017

2017 PROCEEDING NON-INDEX MAIN AUTHOR

19. STATISTICAL ANALYSES IN VALIDATING THE PERFORMANCE OF OPTICAL TOMOGRAPHY SYSTEM IN MEASURING OBJECT DIAMETER

FUNDAMENTAL SCIENCE CONGRESS 2017 (FSC2017) ON 21ST TILL 22ND NOVEMBER 2017

2017 PROCEEDING NON-INDEX MAIN AUTHOR

20. OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE FOR TRANSPARENT OBJECT DETECTION INTERNATIONAL WORKSHOP ON COMPUTED TOMOGRAPHY AND IMAGING TECHNOLOGY

2017 PROCEEDING NON-INDEX MAIN AUTHOR

21. ONLINE OPTICAL TOMOGRAPHY SYSTEM FOR DETECTING AND MEASURING DIAMETER OF SOLID AND TRANSPARENT OBJECTS

IEEE SENSOR JOURNAL

2016 JOURNAL WOS MAIN AUTHOR

22. OPTICAL TOMOGRAPHY SYSTEM: APPLICATION OF CHARGE COUPLED DEVICE FOR SOLID AND TRANSPARENT OBJECT DETECTION

JURNAL TEKNOLOGI

2016 JOURNAL SCOPUS MAIN AUTHOR

23. ONLINE OPTICAL TOMOGRAPHY SYSTEM APPLICATION OF CHARGE-COUPLED DEVICE (CCD) FOR OBJECT DETECTION IN CRYSTAL CLEAR WATER.

FLOW MEASUREMENT AND INSTRUMENTATION

2016 JOURNAL WOS MAIN AUTHOR

24. INTRODUCING AN APPLICATION OF A CHARGED COUPLED DEVICE (CCD) IN AN OPTICAL TOMOGRAPHY SYSTEM JURNAL TEKNOLOGI

2015 JOURNAL SCOPUS MAIN AUTHOR

25. ANALYSIS ON THE PERFORMANCE OF LED AND LASER DIODE WITH CHARGE COUPLED DEVICE LINEAR SENSOR MEASURING DIAMETER OF OBJECT.

JURNAL TEKNOLOGI

2015 JOURNAL SCOPUS MAIN AUTHOR

26. A REVIEW OF THE OPTICAL TOMOGRAPHY SYSTEM

JURNAL TEKNOLOGI

2014 JOURNAL SCOPUS MAIN AUTHOR

PUBLICATION

27. A REVIEW OF TOMOGRAPHY SYSTEM

JURNAL TEKNOLOGI

2013 JOURNAL SCOPUS MAIN AUTHOR

28. OPTICAL TOMOGRAPHY SYSTEM FOR BUBBLES DETECTION IN LIQUID MEDIUM.

ELECTRICAL ENGINEERING RESEARCH COLLOQUIUM FOR ELECTRONICS, POWER, INSTRUMENTATIONS AND CONTROL AND COMMUNICATIONS

2013 PROCEEDING NON-INDEX MAIN AUTHOR

CONSULTATION

1. 100 A NEUTRAL LINK TNBL/QA/BHG.1/PC/N/21/0480

TNB LABS SDN. BHD.

2023 NATIONAL

2. INSULATION PIERCING CONNECTORS FOR CONNECTION OF LOW VOLTAGE BARE CONDUCTOR TO AERIAL BUNDLE CABLE

TNBR

2023 NATIONAL

3. 100A NEUTRAL LINK

TNB LABS SDN BHD

2022 NATIONAL

AWARDS/RECOGNITION

1. MUSOLLI COMPANION

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI BRONZE

2. CONCEPTUAL MODEL FOR A PORTABLE WRIST AND HAND REHABILITATION SYSTEM FOR STROKE PATIENTS

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI SILVER

3. STAFF CONTOH FEBRUARY 2023

2023 UNIVERSITY

4. MOST PROMISING AWARD (IPTA / IPTS / ILK / KV)

2023 NATIONAL

5. ANUGERAH KECEMERLANGAN DAN INOVASI TAHUN 2022

2023 UNIVERSITY