DR. LIYANA BT RAMLI

PENSYARAH UNIVERSITI DS13

CONTACT

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lyanaramli@usim.edu.my

Faculty: Fakulti Kejuruteraan Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0, Ongoing: 2

AREAS OF EXPERTISE

Control System Design And Algorithm

Control Optimization Algorithm

Neural Network For Machine Learning

ACADEMIC QUALIFICATION

PhD in Electrical Engineering (2019)

Master in Electrical Engineering (2015)

Bachelor in Electrical & Electronic Engineering (2011)

RESEARCH

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

`2023` `GERAN PENYELIDIKAN KHAS` `ON GOING` `CO-RESEARCHER`

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

`2022` `GERAN PENYELIDIKAN USIM` `ON GOING` `CO-RESEARCHER`

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

`2022` `GERAN PENYELIDIKAN AGENSI KERAJAAN` `COMPLETED` `CO-RESEARCHER`

4. NEW OPTIMAL ENERGY-EFFICIENT CONTROL OF FLEXIBLE SYSTEMS WITH SIMULTANEOUS PAYLOAD HOISTING AND WIND DISTURBANCE

`2020` `GERAN KPT` `ON GOING` `MAIN RESEARCHER`

5. MODELLING AND CONTROL OF AN AERIAL TRANSPORTATION SYSTEM CARRYING SUSPENDED PAYLOAD

2020   GERAN PENYELIDIKAN USIM RACER   COMPLETED   MAIN RESEARCHER

5. MODELLING AND CONTROL OF AN AERIAL TRANSPORTATION SYSTEM CARRYING SUSPENDED PAYLOAD

2020   GERAN PENYELIDIKAN USIM RACER   COMPLETED   MAIN RESEARCHER

PUBLICATION

1. AUTONOMOUS PERSON-FOLLOWING TELEPRESENCE ROBOT USING MONOCULAR CAMERA AND DEEP LEARNING YOLO

APPLICATIONS OF MODELLING AND SIMULATION

`2024` `JOURNAL` `SCOPUS` `CO-AUTHOR`

2. SWING CONTROL OF 2D OVERHEAD CRANE USING PROPORTIONAL INTEGRAL DERIVATIVE NEURAL NETWORK

9TH IEEE INTERNATIONAL CONFERENCE ON AUTOMATIC CONTROL AND INTELLIGENT SYSTEMS (I2CACIS2024)

`2024` `PROCEEDING` `SCOPUS` `CO-AUTHOR`

3. ADVANCEMENT IN TECHNOLOGY AND ENGINEERING

ADVANCEMENT IN TECHNOLOGY AND ENGINEERING

`2024` `CHAPTER IN BOOK` `EDITOR`

4. DEVELOPMENT OF A SEMI-HUMANOID TELEPRESENCE ROBOT USING ROBOT OPERATING SYSTEM

ADVANCEMENT IN TECHNOLOGY AND ENGINEERING

`2024` `CHAPTER IN BOOK` `CO-AUTHOR`

5. ADAPTIVE INPUT SHAPER FOR PAYLOAD SWING CONTROL OF A 5-DOF TOWER CRANE WITH PARAMETER UNCERTAINTIES AND OBSTACLE AVOIDANCE

AUTOMATION IN CONSTRUCTION

`2023` `JOURNAL` `ERA` `CO-AUTHOR`

6. PSO-BASED PID-PD CONTROLLER OF A GANTRY CRANE WITH PARAMETER UNCERTAINTIES

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT

`2023` `JOURNAL` `SCOPUS` `CORRESPONDING AUTHOR`

7. ROBUST INPUT SHAPING FOR SWING CONTROL OF AN OVERHEAD CRANE

22ND ASIA SIMULATION CONFERENCE

`2023` `PROCEEDING` `NON-INDEX` `CORRESPONDING AUTHOR`

8. METHODS AND APPLICATIONS FOR MODELING AND SIMULATION OF COMPLEX SYSTEMS

COMMUNICATIONS IN COMPUTER AND INFORMATION SCIENCE

`2023` `CHAPTER IN BOOK` `CORRESPONDING AUTHOR`

9. OSCILLATION DETECTION OF A QUADROTOR SYSTEM CARRYING SUSPENDED PAYLOAD USING IMAGE PROCESSING TECHNIQUE

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT

`2022` `JOURNAL` `SCOPUS` `CORRESPONDING AUTHOR`

10. DESIGN AND DEVELOPMENT OF A SEED-SOWING ROBOT PROTOTYPE

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2022

`2022` `PROCEEDING` `NON-INDEX` `CORRESPONDING AUTHOR`

11. SIMULATION OF NUMERICAL METHODS FOR ENGINEERING

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2022 (SAIS2022)

`2022` `PROCEEDING` `NON-INDEX` `CO-AUTHOR`

12. CONTROL OF AN UNDERACTUATED DOUBLE-PENDULUM OVERHEAD CRANE USING IMPROVED MODEL REFERENCE COMMAND SHAPING: DESIGN, SIMULATION AND EXPERIMENT

MECHANICAL SYSTEMS AND SIGNAL PROCESSING

`2021` `JOURNAL` `ERA` `MAIN AUTHOR / CONTACT PERSON IN USIM`

13. EFFECTIVE FORMATION TRACKING OF QUADROTORS WITH INTELLIGENT DISTURBANCE OBSERVER-BASED CONTROL

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY - TRANSACTIONS OF ELECTRICAL ENGINEERING

`2021` `JOURNAL` `SCOPUS` `CO-AUTHOR`

PUBLICATION

14. AUTONOMOUS UAV-BASED CATTLE DETECTION AND COUNTING USING YOLOV3 AND DEEP SORT

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS2021)

`2021` `PROCEEDING` `NON-INDEX` `CO-AUTHOR`

15. LEADER-FOLLOWER FORMATION CONTROL OF QUADROTORS WITH COLLISION AVOIDANCE USING ARTIFICIAL POTENTIAL FIELD

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS2021)

`2021` `PROCEEDING` `NON-INDEX` `CO-AUTHOR`

16. COMBINED NEURAL NETWORK-BASED INPUT SHAPING AND FEEDBACK CONTROL OF AN OVERHEAD CRANE

CONTROL AND MECHATRONICS ENGINEERING IN MULTIPLE APPLICATIONS

`2021` `CHAPTER IN BOOK` `MAIN AUTHOR`

17. EFFICIENT SWING CONTROL OF AN OVERHEAD CRANE WITH SIMULTANEOUS PAYLOAD HOISTING AND EXTERNAL DISTURBANCES

MECHANICAL SYSTEMS AND SIGNAL PROCESSING

`2020` `JOURNAL` `ERA` `MAIN AUTHOR`

18. CONSENSUS TRACKING CONTROL OF MULTIPLE QUADROTORS WITH A COOPERATIVE LEADER

APPLICATIONS OF MODELLING AND SIMULATION

`2020` `JOURNAL` `OTHER DATABASE` `CO-AUTHOR`

19. PAYLOAD SWING CONTROL OF A TOWER CRANE USING A NEURAL NETWORK?BASED INPUT SHAPER

MEASUREMENT AND CONTROL

`2020` `JOURNAL` `SCOPUS` `CO-AUTHOR`

20. DESIGN OF A LOW-COST AUTOMATIC DISINFECTION CHAMBER

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS 2020)

`2020` `PROCEEDING` `NON-INDEX` `CO-AUTHOR`

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

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS 2020)

`2020` `PROCEEDING` `NON-INDEX` `CO-AUTHOR`

22. EFFICIENT CONTROL OF A NONLINEAR DOUBLE-PENDULUM OVERHEAD CRANE WITH SENSORLESS PAYLOAD MOTION USING AN IMPROVED PSO-TUNED PID CONTROLLER

JOURNAL OF VIBRATION AND CONTROL

`2019` `JOURNAL` `ERA` `CO-AUTHOR`

23. DISTURBANCE OBSERVER-BASED FORMATION TRACKING CONTROL OF MULTIPLE QUADROTORS IN THE PRESENCE OF DISTURBANCES

TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL

`2019` `JOURNAL` `ERA` `CO-AUTHOR`

24. IMPROVED UNITY MAGNITUDE INPUT SHAPING SCHEME FOR SWAY CONTROL OF AN UNDERACTUATED 3D OVERHEAD CRANE WITH HOISTING

MECHANICAL SYSTEMS AND SIGNAL PROCESSING

`2019` `JOURNAL` `ERA` `CO-AUTHOR`

25. MODEL REFERENCE COMMAND SHAPING FOR VIBRATION CONTROL OF MULTIMODE FLEXIBLE SYSTEMS WITH APPLICATION TO A DOUBLE-PENDULUM OVERHEAD CRANE

MECHANICAL SYSTEMS AND SIGNAL PROCESSING

`2019` `JOURNAL` `ERA` `CO-AUTHOR`

AWARDS/RECOGNITION

1. MODELLING AND CONTROL OF AN AERIAL TRANSPORTATION SYSTEM CARRYING SUSPENDED PAYLOAD

RESEARCH SEMINAR UNIVERSITI SAINS ISLAM MALAYSIA

`2024` `UNIVERSITI` `CERTIFICATE OF APPRECIATION`

2. FINAL YEAR PROJECT & POSTGRADUATE: RESEARCH & INNOVATION POSTER COMPETITION (RIPC SERIES 1/2023)

`2023` `NATIONAL`

3. PERSON-FOLLOWING TELEPRESENCE ROBOT USING YOLO DEEP LEARNING

International Expo of Innovation Product and System Design (INVIDE) 2023

`2023` `ANTARABANGSA` `SILVER`

4. PERSON-FOLLOWING TELEPRESENCE ROBOT USING YOLO DEEP LEARNING

INNOVATION BANK CHALLENGE 2023 (IBC2023)

`2023` `UNIVERSITI` `SILVER`

5. STAF CONTOH FKAB BULAN OGOS

`2022` `UNIVERSITY`

6. RUBBER TREE TRUNK HUMIDITY INSPECTOR

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRiiN 2022)

`2022` `ANTARABANGSA` `SILVER`