



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

STAFF PROFILE

NAME DR. JUFFRIZAL BIN KARJANTO

FACULTY / CENTRE FAKULTI KEJURUTERAAN MEKANIKAL

DESIGNATION PENSYARAH UNIVERSITI

CURRENT POSITION PENYELARAS - FAKULTI KEJURUTERAAN MEKANIKAL

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ACADEMIC QUALIFICATION

YEAR	QUALIFICATION	INSTITUTION
2019	KEDOKTORAN FALSAFAH (PH.D)	EINDHOVEN UNIVERSITY OF TECHNOLOGY
2012	SARJANA (MASTERS)	UNIVERSITI PUTRA MALAYSIA
2009	SARJANA MUDA (BACHELOR)	OHIO STATE UNIVERSITY

FIELD OF INTEREST

HUMAN FACTORS IN AUTONOMOUS VEHICLE, ENGINEERING DESIGN, USER EXPERIENCE

TEACHING EXPERIENCE *(last 5 years)*

UNDERGRADUATES

SESSION	COURSE
2021/2022	DMCD3523 - ENGINEERING DESIGN
2020/2021	BMCG2312 - MANUFACTURING PROCESS
2020/2021	DMCD3523 - ENGINEERING DESIGN
2020/2021	DMCU2968 - INDUSTRIAL TRAINING
2019/2020	BMCG1523 - ENGINEERING GRAPHICS AND COMPUTER AIDED DESIGN
2019/2020	BMCG2312 - MANUFACTURING PROCESS
2019/2020	DMCD3523 - ENGINEERING DESIGN
2019/2020	DMCU1323 - MANUFACTURING PROCESS
2019/2020	DMCU2968 - INDUSTRIAL TRAINING
2018/2019	BMCG2312 - MANUFACTURING PROCESS
2018/2019	BMCG3011 - MECHANICAL ENGINEERING LABORATORY III

POSTGRADUATES

SESSION	COURSE
2020/2021	MMCU5923 - MECHANICAL SYSTEM DESIGN

LIST OF GRANTS (last 5 years)

YEAR AWARDED	TITLE OF PROJECT	TYPE OF GRANT	AMOUNT (RM)	ROLE
2020	FORMULATIONS OF AUTONOMOUS VEHICLE DRIVING'S TAXONOMY IN TRI-AXIAL ACCELERATIONS USING REAL-ROAD EXPERIMENTAL STUDIES	GERAN FRGS (NATIONAL)	116500	MAIN RESEARCHER
2020	NATURALISTIC AND OBSERVATIONAL STUDY ON COMMUNICATION IN MIXED TRAFFIC SCENARIOS: AUTONOMOUS VEHICLE VS. MOTORCYCLIST	GERAN ANTARABANGSA (INTERNATIONAL)	16700	MAIN RESEARCHER
2020	CORRELATION BETWEEN EARLY AUTONOMOUS VEHICLE MANOEUVRES INFORMATION AND MOTION SICKNESS SYMPTOMS ON FUTURE USERS WHILE PERFORMING NON-DRIVING RELATED TASKS.	GERAN FRGS (NATIONAL)	104800	CO-RESEARCHER
2020	CORRELATION OF DARKNESS LEVEL OF THE ROAD WITH DRIVER BEHAVIOUR	GERAN ANTARABANGSA (INTERNATIONAL)	13800	CO-RESEARCHER
2019	FUNDAMENTAL STUDY OF EARLY VEHICLE'S TRAJECTORY INFORMATION ON OCCUPANTS INSIDE AN AUTONOMOUS VEHICLE	GERAN ANTARABANGSA (INTERNATIONAL)	20509.65	CO-RESEARCHER
2019	THE STUDY OF AUTONOMOUS VEHICLE'S DRIVING BEHAVIOUR ON FUTURE HUMAN USERS USING ON-ROAD EXPERIMENTS	GERAN ANTARABANGSA (INTERNATIONAL)	20509.65	MAIN RESEARCHER

PUBLICATIONS (last 5 years)**JOURNAL**

YEAR	TITLE	NAME OF JOURNAL	AUTHORS
2021	AN ON-ROAD STUDY IN MITIGATING MOTION SICKNESS WHEN READING IN AUTOMATED DRIVING	JOURNAL OF HUMAN UNIVERSITY NATURAL SCIENCES	
2021	MEASURING THE PERCEPTION OF COMFORT IN ACCELERATION VARIATION USING ELECTROCARDIOGRAM AND SELF-RATING MEASUREMENT FOR THE PASSENGERS OF THE AUTOMATED VEHICLE	JOURNAL OF ENGINEERING SCIENCE AND TECHNOLOGY	
2020	DESIGN OF SMART PACKAGING MACHINE LIQUID SOAP USING PUGH'S METHOD	INTERNATIONAL JOURNAL OF EMERGING TRENDS IN ENGINEERING RESEARCH	KHAIRUL ANWAR MOHD SAIB, MUHAMMAD ZAHIR HASSAN, JUFFRIZAL KARJANTO, NIDZAMUDDIN MD. YUSOF, NORFARIZA AB WAHAB
2020	GAINING SITUATION AWARENESS THROUGH A VIBROTACTILE DISPLAY TO MITIGATE MOTION SICKNESS IN FULLY-AUTOMATED DRIVING CARS	INTERNATIONAL JOURNAL OF AUTOMOTIVE AND MECHANICAL ENGINEERING (IJAME)	YUSOF, N. MD; KARJANTO, J.; TERKEN, J. M. B.; DELBRESSINE, F. L. M.; RAUTERBERG, G. W. M.
2018	DEVELOPMENT OF ON-ROAD AUTOMATED VEHICLE SIMULATOR FOR MOTION SICKNESS STUDIES	INTERNATIONAL JOURNAL OF DRIVING SCIENCE	JUFFRIZAL KARJANTO, NIDZAMUDDIN MD. YUSOF, JACQUES TERKEN, FRANK DELBRESSINE, MATTHIAS RAUTERBERG, AND MUHAMMAD ZAHIR HASSAN
2018	THE EFFECT OF PERIPHERAL VISUAL FEEDFORWARD SYSTEM IN ENHANCING SITUATION AWARENESS AND MITIGATING MOTION SICKNESS IN FULLY AUTOMATED DRIVING	TRANSPORTATION RESEARCH PART F: TRAFFIC PSYCHOLOGY AND BEHAVIOUR	JUFFRIZAL KARJANTO, NIDZAMUDDIN MD YUSOF, CHAO WANG, JACQUES TERKEN, FRANK DELBRESSINE, MATTHIAS RAUTERBERG

CONFERENCE

YEAR	TITLE	NAME OF CONFERENCE	AUTHORS
2020	EFFECT OF IMPROVING GRAVITO-INERTIAL FORCE OF THE VEHICLE OCCUPANTS IN REDUCING SEVERITY OF MOTION SICKNESS	THE 7TH MECHANICAL ENGINEERING RESEARCH DAY	NIDZAMUDDIN MD. YUSOF JUFFRIZAL KARJANTO SYABILLAH SULAIMAN JACQUES TERKEN FRANK DELBRESSINE MATTHIAS RAUTERBERG
2020	COMPARATIVE EVALUATION OF TWO PERIPHERAL INFORMATION SYSTEMS USING MOTION SICKNESS SUBJECTIVE RATING	THE 7TH MECHANICAL ENGINEERING RESEARCH DAY	JUFFRIZAL KARJANTO NIDZAMUDDIN MD. YUSOF NORRIZAL MUSTAFFA JACQUES TERKEN FRANK DELBRESSINE MATTHIAS RAUTERBERG
2020	PROOF OF CONCEPT OF THE VIBRATION PATTERN IN INDUCING CALMING EFFECT FOR AUTONOMOUS VEHICLE'S OCCUPANTS	THE 7TH MECHANICAL ENGINEERING RESEARCH DAY	NIDZAMUDDIN MD. YUSOF, JUFFRIZAL KARJANTO, NAKUL SHETTY, MUHAMMAD ZAHIR HASSAN, JACQUES TERKEN, FRANK DELBRESSINE, MATTHIAS RAUTERBERG
2020	FREQUENCY-DOMAIN ANALYSIS OF HEART RATE VARIABILITY IN PASSENGER'S MOTION SICKNESS USING FAST FOURIER TRANSFORM AND AUTOREGRESSIVE MODELING	THE 7TH MECHANICAL ENGINEERING RESEARCH DAY	JUFFRIZAL KARJANTO NIDZAMUDDIN MD. YUSOF ABD FATHUL HAKIM ZULKIFLI JACQUES TERKEN FRANK DELBRESSINE MATTHIAS RAUTERBERG
2019	MOTION SICKNESS MITIGATION IN AUTONOMOUS VEHICLES BY CALMING EFFECT THROUGH VIBRATION	THE 6TH MECHANICAL ENGINEERING RESEARCH DAY	NIDZAMUDDIN MD. YUSOF JUFFRIZAL KARJANTO NAKUL SHETTY JACQUES TERKEN MATTHIAS RAUTERBERG3
2017	SIMULATING AUTONOMOUS DRIVING STYLES: ACCELERATIONS FOR THREE ROAD PROFILES	2ND AUTOMOTIVE INNOVATION AND GREEN ENERGY VEHICLE CONFERENCE (AIGEV 2016)	JUFFRIZAL KARJANTO, NIDZAMUDDIN MD. YUSOF, JACQUES TERKEN, FRANK DELBRESSINE, MUHAMMAD ZAHIR HASSAN, MATTHIAS RAUTERBERG
2017	THE IDENTIFICATION OF MALAYSIAN DRIVING STYLES USING THE MULTIDIMENSIONAL DRIVING STYLE INVENTORY	2ND AUTOMOTIVE INNOVATION AND GREEN ENERGY VEHICLE CONFERENCE (AIGEV 2016)	JUFFRIZAL KARJANTO, NIDZAMUDDIN MD. YUSOF, JACQUES TERKEN, MUHAMMAD ZAHIR HASSAN, FRANK DELBRESSINE, HANNEKE HOOFT VAN HUYSDUYNEN, MATTHIAS RAUTERBERG
2017	THE IDENTIFICATION OF MALAYSIAN DRIVING STYLES USING THE MULTIDIMENSIONAL DRIVING STYLE INVENTORY	2ND AUTOMOTIVE INNOVATION AND GREEN ENERGY VEHICLE CONFERENCE (AIGEV 2016)	JUFFRIZAL KARJANTO, NIDZAMUDDIN MD. YUSOF, JACQUES TERKEN, MUHAMMAD ZAHIR HASSAN, FRANK DELBRESSINE, HANNEKE HOOFT VAN HUYSDUYNEN, MATTHIAS RAUTERBERG
2017	EXPERIMENTAL SETUP OF MOTION SICKNESS AND SITUATION AWARENESS IN AUTOMATED VEHICLE RIDING EXPERIENCE	ADJUNCT PROCEEDINGS OF THE 9TH INTERNATIONAL ACM CONFERENCE ON AUTOMOTIVE USER INTERFACES AND INTERACTIVE VEHICULAR APPLICATIONS (AUTOMOTIVEUI 17)	NIDZAMUDDIN MD. YUSOF, JUFFRIZAL KARJANTO, SHIVAM KAPOOR, JACQUES TERKEN, FRANK DELBRESSINE, MATTHIAS RAUTERBERG
2017	SITUATION AWARENESS AND MOTION SICKNESS IN AUTOMATED VEHICLE DRIVING EXPERIENCE: A PRELIMINARY STUDY OF PERIPHERAL VISUAL INFORMATION	ADJUNCT PROCEEDINGS OF THE 9TH INTERNATIONAL ACM CONFERENCE ON AUTOMOTIVE USER INTERFACES AND INTERACTIVE VEHICULAR APPLICATIONS (AUTOMOTIVEUI 17)	JUFFRIZAL BIN KARJANTO, NIDZAMUDDIN MD YUSOF, ALBERTO MARTINI, CHOW WANG, JACQUES TERKEN, FRANK DELBRESSINE, MATTHIAS RAUTERBERG

POSTGRADUATE SUPERVISION *(last 5 years)*

NO	NAME	LEVEL OF STUDY	ROLE	STATUS
1	SARAH ATIKAH BINTI MUHAMAD RIDZUAN NASARUDDIN	MASTERS	MAIN SUPERVISOR	GRADUATED (2020)
2	MUHAMMAD NUR ALIFF BIN MOHD NORZAM	MASTERS	MAIN SUPERVISOR	ACTIVE
3	MUHAMMAD ZAINUL ABIDIN BIN KAMALUDIN	MASTERS	MAIN SUPERVISOR	ACTIVE

CONSULTANCY

YEAR	TITLE OF PROJECT	AGENCY	ROLES	LEVEL
2020	UKM STUDENTS CHAMPIONS DEVELOPMENT WORKSHOP	ALAM SINERGI TEKNIK SDN BHD	LEADER	NATIONAL
2020	BENGKEL PEMBANGUNAN BAHAN PDPDT BERASASKAN IPAD (POLITEKNIK METRO JB)	ALAM SINERGI TEKNIK SDN BHD	LEADER	NATIONAL
2020	BENGKEL LANJUTAN PEMBANGUNAN BAHAN PDPDT BERASASKAN IPAD (POLITEKNIK METRO JB)	ALAM SINERGI TEKNIK SDN BHD	MEMBER	NATIONAL

LIST OF RESEARCH AWARDS *(last 5 years)*

YEAR	TITLE	EXHIBITION	LEVEL	AWARD
2021	HYBRID VERTICALLY TAKE-OFF AND LANDING UNMANNED AERIAL VEHICLE (HYBRID VTOL UAV)	EKSPLO PENYELIDIKAN ANTARABANGSA , WORLD INVENTION CREATIVITY OLYMPIC 2021	INTERNATIONAL	GOLD

STAFF PROFILE

KATEGORI MAKLUMAT	PEJABAT DIRUJUK
PERSONAL INFORMATION	BAHAGIAN SUMBER MANUSIA, PEJABAT PENDAFTAR
ACADEMIC QUALIFICATON	
PROFESSIONAL MEMBERSHIP / LEARNED SOCIETY	
TEACHING EXPERIENCE	BAHAGIAN PENGURUSAN AKADEMIK, PEJABAT PENDAFTAR
<ul style="list-style-type: none"> • UNDERGRADUATES 	
<ul style="list-style-type: none"> • POSTGRADUATES 	PUSAT PENGAJIAN SISWAZAH (PPS)
POSTGRADUATE SUPERVISION	PUSAT PENGAJIAN SISWAZAH (PPS)
FIELD OF INTEREST	PUSAT PENGURUSAN PENYELIDIKAN DAN INOVASI (CRIM)
LIST OF GRANTS	
LIST OF RESEARCH AWARDS	PUSAT PENGKOMERSILAN (UCC)
INTELLECTUAL PROPERTIES	
COMMERCIALIZATION	
PUBLICATIONS	PERPUSTAKAAN LAMAN HIKMAH
CONSULTANCY	PUSAT JARINGAN INDUSTRI DAN MASYARAKAT (PJIM)