

ULFAH KHAIRIYAH LUTHFIYANI

Instructor of Electrical Engineering Department
Alfaisal University

Experienced educator and researcher in electrical engineering, robotics, and data science with a strong track record in academic teaching, national research projects, and innovation ecosystem development.



EDUCATION

INSTITUT TEKNOLOGI INDONESIA

2011 - 2015 | Bachelor of Science in Electrical Engineering | Final Thesis : Design Planning of Mini Hydro Power Plant (2x3.1) MW at Cianten, Bogor, Indonesia

KOREA NATIONAL UNIVERSITY OF TRANSPORTATION

2018-2020 | Master of Engineering in Electrical Engineering | Thesis : Kinematical and Dynamical Analysis of Robot Assisted Lower Limb Rehabilitation

INSTITUT TEKNOLOGI INDONESIA

2022 | Engineer Professional | Colloquium : Engineering practice on Kinematical and Dynamical Analysis on Robot-Assisted Lower-

limbRehabilitation System

CERTIFICATION

CISCO

2021 | IT Essentials, Networking Essentials, and Cybersecurity Essentials CISCO 2022 | IOT Fundamentals: Big Data & Analytics, and Programming Essentials in Python CISCO

Ministry of Communication & Information Technology of the Republic of Indonesia

2022 |Data Science, Data Management Staff

Gadjah Mada University

2022 |CertifiedInternal Auditor (CIA)

SKILLS

- C++,R, & Python Programming
- Electrical Transient Analytical Program (ETAP)
- Microsoft Foundation Class (MFC), OpenCV, OpenGL
- Matlab & Mathematica
- Orange & Rapidminer
- Microsoft Visual Studio
- Machine Learning & Artificial Intelligence

EXPERIENCE

2015 - 2025 INSTITUT TEKNOLOGI INDONESIA LECTURER

- Teach several subjects including Basics of Programming, Structured Programming, Electrical Analysis and Power Computerization, Electricity Measurement, Digital Transformation, and Technology-Based Entrepreneurship.
- Supervise bachelor students and studentcommunity in Dept. Electrical Engineering.

2022 PT INDONESIA POWER | PLTU Pelabuhan Ratu TRAINER

Train and guide workers to understand data science concepts and their implementation in power generation units.

2020-2025 Ministry of Communication & Information Technology of the Republic of Indonesia TRAINER

Trainer of Fresh Graduate Academy - IT Essentials, Networking Essentials, Cybersecurity Essentials, and Fundamental of Big Data Using Python. Trainer of Government Talent Academy - Data Science Fundamental and Big Data Analytics Trainer of Thematic Academy - Data Science Fundamental, Data Management Staff, and AI Implementation for Elementary & Secondary School.

2018-2020 KOREA NATIONAL UNIVERSITY OF TRANSPORTATION RESEARCH ASSISTANT

Senior lab member at Human-Centered Robotics Lab (HCRL). Planned, modified, and executed research techniques, procedures and tests for lower limb rehabilitation platform. Modified software and rehabilitation platform.

2025 INSTITUT TEKNOLOGI INDONESIA HEAD OF INNOVATION AND BUSINESS INCUBATOR

Organized business incubator. Managed incubation schedule and activities. Create technopreneur curriculum and innovation program

PUBLICATION

Gait pattern modification based on ground contact adaptation using the robot-assisted training platform (RATP)

S Shanmuga Prasad, UK Luthfiyani, Y Kim - Medical & Biological Engineering & Computing, 2024

Analisis Perbandingan Indeks Keandalan Sistem Jaringan Distribusi dengan Metode Section Technique dan Reliability Index Assessment (RIA): Studi Kasus Gardu Induk Balaraja

Ulfah Khairiyah Luthfiyani, Adi Setiawan, Samsul Arif | INSOLOGI: Jurnal Sains dan Teknologi | ISSN 2828-4984 (Media Online) | ISSN 2828-4992 (Media Cetak) | Vol. 2 No. 1 (Februari 2023) 250-264 | DOI: 10.55123/insologi.v2i1.1782

Penggunaan ChatGPT Untuk Pendidikan di Era Education 4.0: Usulan Inovasi Meningkatkan Keterampilan Menulis

Adi Setiawan, Ulfah Khairiyah Luthfiyani | Jurnal PETISI, Vol. 04, No. 01, Januari 2023 | e-ISSN: 2721-6276 | <https://unimuda.e-journal.id/jurnalteknologiinformasi/article/view/3680/1334>

Optimization of The Durian Peel Waste Adsorbent in The Purification of Used Cooking Oil

Yatmani, S., Kuntolaksono, S., Sivtiani, I., Novitasari, W., & Luthfiyani, U. K | Journal of Bioresources and Environmental Sciences, 1(3), 95-100. <https://doi.org/10.14710/jbes.2022.16356> | 2022

INVERS DYNAMICS MODEL FOR LOWER LIMB REHABILITATION ROBOT USING LAGRANGIAN METHOD

Ulfah Khairiyah Luthfiyani, Tris Dewi Indraswati, Adi Setiawan | Seminar Nasional Pendidikan dan Ilmu Matematika (SENANDIKA) 2020 | Pemanfaatan Teknologi VR dan AR dalam Pembelajaran Matematika | Universitas Islam Malang Malang | 2020.12 | ISBN: 978-623-71141-2-8

Walking Pattern Adaptation of a Wearable Robot based on the Change of Ground Contact State

Kim Young-Woo , Ulfah Khairiyah | Korean Institute of Electrical Engineers | Proceedings of the Korean Institute of Electrical Engineers | 2019.07 | 1,577-1,578 (2 pages)

Development of lower limb rehabilitation platform-Generation of gait pattern and adaptation to environment

Luthfiyani Ulfah Khairiyah , Kim Young-woo | Korean Institute of Electrical Engineers | Information and Control Proceedings | 2018.10 | 79-80 (2 pages)

ADDITIONAL SKILLS

Organizational general skills: Trustworthy, humble,friendly, disciplined, can work in a team, self-motivated, passionate, Complex Problem Solving, and responsibilities at work. Capable of working under pressure and after hours; Tight deadlines and have work experience with handling students in some courses. Have expertise with Critical Thinking, Reasoning, Complex problem solving, and Compliance for Self Development in a team.