

Aminuddin Rizal

Gombel Permai, Semarang | 088806517435 | ir.dr.ar@gmail.com

Profile

Dedicated and dynamic Computer Engineer with a passion for teaching and sharing knowledge. Possessing extensive experience in both industry and academia, with a solid foundation in computer engineering principles and technologies. Proven track record of delivering engaging lectures and fostering an interactive learning environment conducive to student success. Adept at integrating real-world examples and practical applications into curriculum to enhance student understanding. Committed to staying abreast of emerging trends in computer engineering and incorporating them into instructional materials. Seeking to leverage expertise in computer engineering and passion for education to inspire and empower the next generation of engineers.

Experience

INTERN | LEMBAGA ILMU PENGETAHUAN INDONESIA | FEBRUARY – APRIL 2014

- Build an embedded system for water sampling
- Design and implement wireless sensor network for shrimp field
- Write academic paper for international publication (<https://iee.org/abstract/document/7237850>) 40 citations

QUALITY CONTROL AND FAILURE ANALYST | INDONESIA EPSON INDUSTRY | NOVEMBER 2015 – FEBRUARY 2016

- Control quality of electronic part production for some printers model
- Analyze and giving recommendations to product defect or any potential root cause

COMPUTER ENGINEERING LECTURER | UNIVERSITAS MULTIMEDIA NUSANTARA (UMN) | JANUARY 2019 – JANUARY 2022

- Lecturer in Computer Engineering, end-to-end pedagogy process including updating lesson plan into OBE and following current problem, build interactive and easy to understand lecture materials, assess and evaluate student outcomes. Active in both research and community outreach with publish several publication and intellectual property
- Appointed as research coordinator in faculty of engineering and informatics under the Dean. The task is to encourage research activities in faculty by organize meeting routine (FTI research talk), organize coaching clinic for publication and grants, manage UMN journals, collaborate with other parties related to research
- Active in promoting and marketing UMN to promising students
- Active in developing curriculum and other administrative paper related to accreditation and quality improvement
- Successfully running some project from internal and external

ELECTRONIC ENGINEERING LECTURER | POLITEKNIK NEGERI SEMARANG | JANUARY 2022 - NOW

- Lecturer in Electronic Engineering
- Lead of study program accreditation taskforce
- Lead and manage of some projects

Education

BACHELOR OF ELECTRONIC ENGINEERING | AUGUST 2015 | UNIVERSITAS DIPONEGORO, SEMARANG, INDONESIA

GPA 3.41 of 4; Focusing on Biomedical Engineering and Microelectronic under advisory of Munawar Riyadi Ph. D.; Electronic Laboratory Coordinator in 2015; Outcome research with 2 IEEE conference paper

MASTER OF ELECTRONIC ENGINEERING | AUGUST 2018 | NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, TAIPEI, TAIWAN

GPA 4.10 of 4.3; Belong to Biomedical and Embedded System (BEST) Laboratory under supervision of Prof. Lin Yuan-Hsiang (Taiwan Chief of Electronic); Lead with 1 IEEE conference paper and 1 prestigious regional symposium paper

Skills & Abilities

- Electronic Engineering (FPGA, Analog, IoT)
- Computer Engineering (AI, AR, and Networking)
- Project Manager
- Education Quality Control and Improvement
- Innovative and open minded
- Fun and energetic

Publication

[Sinta ID: 6682325](#) [Scopus ID : 57189356001](#) [Google Scholar ID : 2J-ksUAAAAJ](#)

Title	Year	Indexed
FPGA-based system for countinuous monitoring of three vital signs of human body	2015	Scopus
Development of FPGA-based three-lead electrocardiography	2016	Scopus
Contactless vital signs measurement for self-service healthcare kiosk in intelligent building	2018	Scopus
Performance improvement of human activity recognition based on ensemble empirical mode decomposition (EEMD)	2018	Scopus
A Quick Walkthrough untuk Pengenalan Teknologi IC	2019	Sinta 4
An SoC-Based System for Real-time Contactless Measurement of Human Vital Signs and Soft Biometrics	2019	Scopus
Step Rate Estimator from Wearable Photoplethysmography Signal	2019	Scopus
Tahapan Desain dan Implementasi Model Machine Learning untuk Sistem Tertanam	2020	Sinta 4
U-BIKE: UMN Self-powered Indoor Trainer Bike	2021	Sinta 3
Design and Realization of Band Pass Filter in K-Band Frequency for Short Range Radar Application	2021	Sinta 2
Building "Passwle" System Based on Siamese Neural Network	2021	Scopus
Allergen Recognition in Food Ingredients with Computer Vision	2021	Scopus
Real Time Web-based Facemask Detection	2022	Scopus

KSU (KOICA-SILLA-UMN) Short Class: Pelatihan Cloud Computing AWS	2023	Nasional
Illuminance Color Independent in Remote Photoplethysmography for Pulse Rate Variability and Respiration Rate Measurement	2023	Scopus
Application of Smart Bell Wifi to Improve Study Time Discipline at SD Islam Fitra Bhakti Pudak Payung, Banyumanik, Semarang	2023	Sinta 4
Comparison of a Circular Patch Unit Cell Performance for Reflector Applications between Using FR4 and F4BMX220 Substrates at 3.5 GHz Frequency	2023	Sinta 2

External Funding Project

Smart Irrigation

Partner : BBP Mektan
 Year : 2019-2020
 Value : Rp. 39.000.000,-
 Role : Project Lead
 Documentation : [News](#)



KOICA-Silla-UMN Industry 4.0

Partner : KOICA and Silla University
 Year : 2020-2021
 Value : Rp. 11.000.000.000,-
 Role : Project Coordinator
 Documentation : [News](#)

Matching Fund: iSense

Partner : PT.Telkom, PT. Rohde & Schwarz
 Year : 2023
 Value : Rp. 419.500.000,-
 Role : Project Lead



iSense



RAMA

Matching Fund: RAMA

Partner : PT.Telkom, PT. Rohde & Schwarz
 Year : 2023
 Value : Rp. 326.071.000,-
 Role : Project Member



Competitive Fund

Partner : PT. Efortech Solusi Integra
 Year : 2024
 Value : Rp. 698.500.00,-
 Role : Project Lead

Achievement

Name	Year	Level
Bronze medal InnovateFPGA	2018	International
Best Paper Award IGBSG Conference	2018	International
Best Paper Award EECSI Conference	2019	International
Leading Prodi D3 Teknik Elektronika to achieve “UNGGUL” after 40 years	2023	National

Role and Association

- Member of Unit Pengelola Program Studi (UPPS) Polines
- Member of Persatuan Insinyur Indonesia
- Member of FORTEI