

Research Interest

- Machine Learning, Deep Learning, Reinforcement Learning
- Intelligent Internet of Things
- Evolutionary Optimization Algorithms
- Operational Research
- Computational Intelligence
- Algorithm Generation/Customization
- Smart Living
- Smart Transportation

Education

- 2018–2020 **Master of Science (Electronics Engineering)**, GPA 3.88/4.30, Kyungpook National University, South Korea.
- 2010–2014 **Bachelor of Engineering (Informatics Engineering)**, GPA 3.49/4.00, University Harapan Medan, Indonesia.

Journal Publications

Uyeh, D. D., **Ramlan, F. W.**, Mallipeddi, R., *Evolutionary Greenhouse Layout Optimization for Rapid and Safe Robot Navigation.*, IEEE Access, 7, 88472-88480, DOI: 10.1109/ACCESS.2019.2926566.

Conferences Publications

Ramlan F.W., Palakonda V., Mallipedi R., *Differential Evolutionary (DE) Based Interactive Recoloring Based on YUV Based Edge Detection for Interior Design.*, International Conference on Information and Communication Technology Convergence (ICTC 2019), Jeju, South Korea.

Ramlan F.W., Palakonda V., Mallipedi R., *Hierarchical Approach Based Evolutionary Algorithm for Many-Objective Optimization.*, International Conference on Artificial Intelligence and Soft Computing (ICAISC 2019), Seoul, South Korea.

Ghorbanpour S., Palakonda V., **Ramlan F. W.**, Mallipeddi R., *An Experimental Short Review On Color Image Quantization.*, International Conference on Artificial Intelligence and Soft Computing (ICAISC 2019), Seoul, South Korea.

Symposium / Seminar / workshop

- 2018 "Multi-agent Systems to Maximize Thermal Comfort and Minimize Energy Consumption" Presented in Joint Workshop on CESLeA Project, Kyungpook National University

Thesis Information

M.Sc Thesis (Fall 2019)	Evolutionary Multi/Many-objective Approaches for Next Release Optimization Problem, <i>Details:</i>, This project aimed to solve the multi-objective next release optimization problem (MONRP) for the trade-off between feature selection, resource allocation, and minimization of cost for the future release of a software system. The optimization framework helps to find the best features to meet customer needs and commercial profit for the software industry.
Undergraduate Project (Spring 2014)	Development of a Web-Based Project Management Platform using Waterfall Technique, <i>Details:</i>, This project proposed a project management platform that was aimed to manage the development time in new projects and ongoing projects, especially for software development industries. The platform was designed by the principle of waterfall model where project activities were broken down into linear sequential phases in which each step depends on the deliverable of the previous one and corresponds to a specialization of tasks.

Technical Skills

Programming Languages	Python, C++, MATLAB	Framework	Django, Laravel, Vue.js
Machine Learning	Keras (Tensor flow), Pandas, Scikit-learn	Database	MySQL, PostgreSQL
Data science	R Hadoop	Report generation	LaTex, Ms. Word
Platforms	Linux (Ubuntu), Windows	Version control	Git
Design	Photoshop, AutoCAD, Matlab Simulink		

Research Experience

2020–Present	Research & Development Scientist , Institute of Modern Architecture and Technology, Medan, Indonesia. <ul style="list-style-type: none">▪ Smart Living.
2018–2020	Research Assistant , Evolutionary Computation and Intelligent System Lab, <i>Kyungpook National University</i> , Daegu, South Korea. <ul style="list-style-type: none">▪ Green House Layout Optimization for Robot Navigation▪ Development of Multi-Agent Systems to Maximize Thermal Comfort and Minimize Energy Consumption in Buildings (Collaborative project with <i>KNU-LG Electronics Convergence Research Center</i>)▪ Differential Evolutionary (DE) Based Interactive Recoloring algorithm for Interior Design.
2016–2017	Research Assistant Intern , <i>Intelligent Robot Laboratory</i> , South Korea. <ul style="list-style-type: none">▪ Facial Detection Algorithm for autonomous Vehicles

Teaching experience

- Spring 2019 **Graduate Teaching Assistant**, Lecture on Computational Intelligent Systems, School of Electronics Engineering, Kyungpook National University, South Korea.
- Fall 2018 **Graduate Teaching Assistant**, Lecture on How to Write Research Papers, School of Electronics Engineering, Kyungpook National University, South Korea.
- 2017-2018 **College Teacher**, Department of Computer Science, Panca Budi University, Indonesia.
- 2017 **Tutor**, Course on Fundamental of Designs, Mega University, South Korea.

Work experience

- 2014-2016 **Programmer**, RADFI Startup, Medan, Indonesia.
- 2012-2014 **Web Developer**, MAT Architect, Medan, Indonesia.
- 2009-2012 **Web Developer**, Indonesia Parental Institute, Medan, Indonesia.
- 2008 **Intern Web Programmer**, PT Web Media, Medan, Indonesia.

Scholarship and Awards

- 2018-2020 **KNU International Scholarships (KINGS)**, *Kyungpook National University*, Tuition waived (USD 12,000) for a period of 2 years.
- 2018-2020 **National Research Foundation (NRF)**, *Kyungpook National University*, Monthly Stipend (USD 8,487) per annum.
- 2018-2020 **Brain Korea (BK21)**, *Kyungpook National University*, Monthly Stipend (USD 12,000) per annum.

Languages

English Advanced (Proficient)

Indonesia Native

Korea Basic

Reference

Available Upon Request.