Fitria Wulandari

Research Interest

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

Education

2021–Present **Full-Time Structured PhD Student in Artificial Intelligence (Computer Science)**, National University of Ireland Galway (NUIG), Ireland.

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 Convergenc (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

91A Upper Newcastle, Co.Galway, H91Y2DV, Ireland.

https://fitriaramlan.github.io/Portfolio/ • *f.wulandari1@nuigalway.ie*

Thesis Information

M.Sc Thesis (Fall 2019) **Evolutionary Multi/Many-objective Approaches for Next Release Optimization Problem**, *Details:*,
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**, *Details:*,
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

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

Research experience

2021–Present **Doctoral Researcher (PhD Student)**, SFI Centre for Research Training in Artificial Intelligence (CRT-AI).
Genetic Programming for Synthetic Data in Artificial Intelligence.

2018–2020 **Research Assistant**, Evolutionary Computation and Intelligent System Lab.
Green House Layout Optimization for Robot Navigation.

2018–2020 **Research Assistant**, *KNU-LG Electronics Convergence Research Center.*
Development of Multi-agent Systems to Maximize Thermal Comfort and Minimize Energy Consumption in Buildings.

2018–2020 **Research Assistant**, *Kyungpook National University.*
Differential Evolutionary (DE) Based Interactive Recoloring algorithm for Interior Design.

2016–2017 **Research Assistant**, *Intelligent Robot Laboratory.*
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

2021-2025 **Science Foundation Ireland (SFI)**, *National University of Ireland Galway (NUIG).*

2018-2020 **KNU International Scholarships (KINGS)**, *Kyungpook National University.*

2018-2020 **National Research Foundation (NRF)**, *Kyungpook National University.*

2018-2020 **Brain Korea (BK21)**, *Kyungpook National University.*

Languages

English Fluent

Reference

Available Upon Request.