

# FITRIA WULANDARI

PhD Researcher | AI, Interpretability Model, & Optimization

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## EXPERIENCE

### PhD Researcher

University of Galway | Science Foundation Ireland Centre for Research Training in Artificial Intelligence (SFI CRT-AI)

October 2021 – Ongoing Galway, Ireland

- Synthetic data for global interpretable regression modelling from limited data in interpolation by using knowledge distillation to train one model to another while improving or maintaining the accuracy by training on synthetic data and for later use in extrapolation (submitted to LOD Conference 2023: [link](#))

### Research Assistant

Kyungpook National University | Evolutionary Computation and Intelligent Systems (ECIS) Lab

February 2018 – March 2020 Daegu, South Korea

- Green House Layout Optimization for Robot Navigation and Hierarchical Approach Based Evolutionary Algorithm For Many-Objective Optimization ([paper link](#))
- Multi-objective next release optimization problem (MONRP) for the trade-off between three objectives 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. ([thesis link](#) and [slides link](#))

## PUBLICATIONS

### Journal Articles

- A. Fajar, R. Trialih, and F. W. Ramlan, "A decentralized file storage for effective e-government," *Indonesia Post-Pandemic Outlook: Environment and Technology Role for Indonesia Development*, p. 279, 2022.
- D. D. Uyeh, F. W. Ramlan, R. Mallipeddi, et al., "Evolutionary greenhouse layout optimization for rapid and safe robot navigation," *IEEE Access*, vol. 7, pp. 88 472–88 480, 2019.

### Conference Proceedings

- F. W. Ramlan, V. Palakonda, and R. Mallipeddi, "Differential evolutionary (de) based interactive recoloring based on yuv based edge detection for interior design," in *2019 International Conference on Information and Communication Technology Convergence (ICTC)*, IEEE, 2019, pp. 597–601.
- F. W. Ramlan, V. Palakonda, Mallipedi R., "Hierarchical Approach Based Evolutionary Algorithm For Many-Objective Optimization," in *2019 International Conference on Artificial Intelligence and Soft Computing (ICAISC)*, vol.7, 2019, pp. 7-12. ([paper link](#))

## EDUCATION

### Ph.D. Artificial Intelligence

University of Galway

Oct 2021 – Ongoing Ireland

Research: Hybrid Evolutionary and Neural Program Synthesis for Artificial Intelligence

### M.Sc. Electronics Engineering

Kyungpook National University | GPA 3.88/4.30

Feb 2018 – Feb 2020 South Korea

Thesis: Evolutionary Multi/Many-objective Approaches for Next Release Optimization Problem

### B.Sc. Informatics Engineering

University Harapan Medan | GPA 3.49/4.00

Sep 2010 – Jul 2014 Indonesia

Project: Development of a Web-Based Project Management Platform using Waterfall Technique

## SKILLS

Python Sklearn Genetic Programming  
Regression Statistical Analysis C++  
Single & Multi-objective Optimization

## LANGUAGES

English ● ● ● ● ●

Indonesian ● ● ● ● ●

## AWARDS

- SFI CRT-AI | Oct 2021 - Ongoing (Support funding during a PhD program)
- National Research Foundation South Korea | 2018 - 2020
- KNU International Scholarships (KINGS) | 2018 - 2020
- Brain Korea 21 (BK21) | 2018 - 2020

## REFERENCE

Available Upon Request