



NTNU

Norwegian University of  
Science and Technology

# Introduction of New PhD Candidate

RAMS Group Meeting: 02.03.2023

# About me



## Andrie Pasca Hendradewa

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Assistant Professor at Department of Industrial Engineering  
Universitas Islam Indonesia (UII)



PhD Candidate at Dept. of Mechanical and Industrial Engineering  
Norwegian University of Science and Technology (NTNU)

# Education



## Bachelor Degree Telkom University

Department of Industrial Engineering

Thesis topic:

Information System Design of E-Commerce



## Master Degree Institut Teknologi Bandung

Department of Industrial Engineering

Thesis topic:

Usability Engineering / Human Computer Interaction

# Working experience

- UI/UX Designer for:
  - Mobile apps → Adobe Flash, Photoshop
  - Wordpress theme → Photoshop, HTML, CSS, Javascript
- Assistant Professor, with subject taught:
  - Programming Logic → flowchart, pseudocode, Python
  - Stochastic Model → bellman equation, markov chain, game theory
  - Data Mining → AHP & ANP, data mining
  - Computer Simulation → queuing theory, monte-carlo simulation
  - Business Intelligence → OLAP, query, data visualization
- Seasonal Instructor, every 2<sup>nd</sup> semester break:
  - Python Programming → basic command and structure in Python
  - Big Data & Analytics → fundamental knowledge, image & text analysis
  - AI for Junior Developer → ANN, Deep Learning with Tensorflow

# Previous research

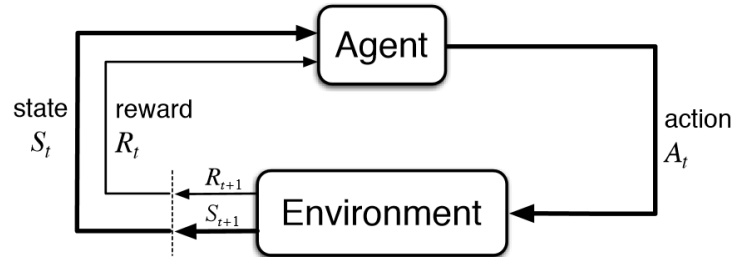
- Designing Health Recommender System based on Patient Medical Records Database using Big Data Analytics Framework
- Early Warning System for Driver's Drowsiness Based on Facial Expression
- Schedule Risk Analysis by Different Phases of Construction Project Using CPM-PERT and Monte-Carlo Simulation
- Social Network Analysis and Topic Modeling of Twitter User Interaction Related to Indonesia E-Commerce Marketing Strategies
- Cognitive Workload Evaluation in Visual-Auditory Navigation System Through EEG Measurement Driving Performance Using Driving Simulator
- Risk Analysis on the Growth Rate of Covid-19 Cases in Indonesia Using Statistical Distribution Model
- Expert System for Selecting Product Packaging Materials as a Means to Achieve Sustainable Development Goals.

# PhD research project

## Reinforcement Learning (RL) to Improve Maintenance Strategy

Goal:

Optimizing maintenance activity by minimizing the carbon emission /energy



<https://towardsdatascience.com/reinforcement-learning-101-e24b50e1d292>

**Thank you.**