

TIA DWI SETIANI

tiadwi.s@gmail.com | www.linkedin.com/in/tiadwisetiani | github.com/tiadwi | <https://tiadwis.medium.com> | (+62) 85795861177

EDUCATION

Oregon State University, *College of Education* – USA | 2022

- Certificate in Instructional Design and Development
 - Completed a 6-month, 18-CEU (180-hour) online professional training program on instructional design and course development through the College of Education.

Bandung Institute of Technology (ITB) – Indonesia

- **M.Sc. in Computational Science | 2011 - 2014**
 - Thesis: *Study on the Efficiency of Time Computation in X-ray Imaging Simulation based on the Monte Carlo Algorithm using Graphic Processing Units.*
 - Advisors: Prof. Suprijadi and Dr. rer. nat Freddy Haryanto
- **B.Sc. in Physics | 2006 - 2011**
 - Final Project: *Stereo Vision to Determine Depth in 2D Images.*
 - Advisor: Prof. Suprijadi

AWARD AND FELLOWSHIP

Australia Awards Scholarship – *Short-Term Award*, Griffith University, Australia | 2024

- Awarded for contributions to vocational education, computational education, and skills development in Indonesia.
- Participated in the “Skills Forecasting for the Fourth Industrial Revolution” program.

Google Developer – *Women Developer Academy*, Southeast Asia | 2021

- Top 5 presenter and joined the Women in Tech Speaker Community.

RESEARCH EXPERIENCES

Learning Analytics for Computing Education – Dicoding Indonesia | 2020 - present

- Conducted mixed-method research, including data analytics, surveys, and user testing, to better understand how learners engage and perform in large-scale online computing courses.
- Designed and evaluated AI-powered feedback for formative assessment at scale.
- Findings informed data-driven learning design and future innovation strategies.

GPU-Accelerated X-ray Imaging Simulation – Bandung Institute of Technology (ITB) | 2013–2014

- Developed a simulation framework using 384–2304-core GPUs, achieving 20–114× faster performance than CPU execution.

Stereo Vision for Depth Estimation – Bandung Institute of Technology (ITB) | 2010–2012

Bandung, Indonesia | 2010–2012

- Implemented stereo vision using MATLAB and OpenCV, achieving a 3.5% average error rate in depth estimation.

PUBLICATION AND PROJECTS

- [Journal Article] **Setiani, T. D., Suprijadi, & Haryanto, F.** (2016). *Study on the efficiency of time computation in X-ray imaging simulation based on the Monte Carlo algorithm using graphics processing units.* AIP Conference Proceedings, 1719, 030007. <https://doi.org/10.1063/1.4943702>
- [Book] Arfiandi, O., Wicaksono, N., **Setiani, T. D.**, et al. (2025). *IT Talent Roadmap: Towards Golden Indonesia 2045*, Dicoding, Indonesia. [Link](#).
- [Book] Alodia, A D., Arumsari, M., Anggraeni, D., **Setiani, T.D.**, et al. (2024). *Towards Golden Indonesia 2045: The Impact of Bangkit as part of Merdeka Belajar Kampus Merdeka for the Country*, Dicoding, Indonesia. [Link](#).

Course Development – Dicoding Indonesia:

- Designed and developed content, assessment, and ongoing evaluation of the learning experience in high-impact courses:
 - **AI/ML:** Applied ML (expert level), ML Development (intermediate level), ML for Beginners.
 - **Programming:** Basic Python.
 - **Soft Skills:** Personal Development, Career Preparation.
- Supported over 105,000 learners through project-based, scalable online learning.

Assessment Innovation - Dicoding Indonesia

- Built scalable and automated assessment systems in collaboration with subject matter experts (SMEs)
- Projects include AI-assisted essay grading, ML model evaluation, and inline code feedback systems.

LEADERSHIP AND PROFESSIONAL EXPERIENCES

LAI Research Lab | Researcher (June 2025 - present)

- Led research initiatives at Learning Analytics Indonesia to enhance educational outcomes through data-driven insights.
- Conducted original studies on learning analytics methodologies, targeting publications for educators and EdTech professionals.

Google Bangkit Academy | Curriculum Manager (January 2023 - present)

- Led curriculum development for a career readiness program in collaboration with Google, the Ministry of Education, and leading Indonesian tech companies.
- Trained 20,000+ students from 500+ universities, with 27% women participation and a 93% graduation rate.
- Designed feedback loops that improved student satisfaction (from 4.14 in 2021 to 4.73 in 2024).

Dicoding Indonesia | Learning Designer Lead (October 2020 - present)

- Designed and evaluated 10+ learning paths in collaboration with SMEs and global tech companies (Google, AWS, and Microsoft)
- Applied learning analytics to improve course design and student engagement.

Pasundan University | Lecturer in Informatics Engineering study program (2014 - 2019)

- Taught courses in Probability and Statistics, Computational Theory, Logic, and Discrete Mathematics.

TECHNICAL SKILLS

Programming: Python.

Machine Learning Library: TensorFlow, Scikit-Learn, Keras.

Specializations: Learning Analytics, AI in Education, and Instructional Design.

English: IELTS 7.0 overall.

INVITED TALKS AND WORKSHOPS

- **SAIL Initiative and Labtek Indie (2025)** – Co-creator, Workshop in Sustaining Education in Conflict Zones.
- **USAID Higher Education Partnership Initiative Community in Practice Forum (2024)** – Panelist, on Industry – Curriculum Alignment and Women in STEM.
- **Dicoding Career Fair (2023)** – Speaker, Empowering Women in Tech (4,700+ live viewers).
- **INCO Academy Work in Tech Indonesia (2022)** – Speaker, Supporting Women's Tech Career.
- **IBM Indonesia X Ministry of Communication and Information, Republic of Indonesia (2021)** – Master Trainer, Python and Machine Learning.
- **Microsoft Indonesia X DQ Labs Academy (2019)** – Assistant Trainer, Data Science with Azure.

VOLUNTEERING ACTIVITIES

- **She Loves Data Chapter Indonesia – Instructor and Curriculum Team** | 2025 – present
Design and deliver AI and data-related training, mentor participants, empower women, and promote diversity in tech.
- **Generation Girl – Mentor** | 2025
Trained high school students in Bandung, Indonesia, on Responsible AI.
- **Computer Science Students Association Gajah Mada University – Mentor** | 2021
Mentored Data Science and Machine Learning in a five-week workshop series for undergraduate students.
- **SIWARE – Training Facilitator** | 2010 – 2011
Facilitated workshops on self-awareness, communication, and career development.

REFERENCES

Prof. Suprijadi Haryono, suprijadi@fi.itb.ac.id

Instrumentation and Computational Physics research group, Department of Physics, Institut Teknologi Bandung.

Dr. rer. nat Freddy Haryanto, freddy@fi.itb.ac.id

Nuclear Physics and Biophysics research group, Department of Physics, Institut Teknologi Bandung.

Dr. Ririn Dwi Agustin, S.T., M.T., ririn_dwia@unpas.ac.id

Department of Informatics Engineering, Faculty of Engineering, Universitas Pasundan.