

# Yayang Matira

*A Master's student in Computer Science at Universitas Gadjah Mada*

Yogyakarta, Indonesia

Email: [yayangmatira@mail.ugm.ac.id](mailto:yayangmatira@mail.ugm.ac.id)

Phone: +62-858-2371-4082

LinkedIn: <https://linkedin.com/in/yayang-matira>

---

## Summary

Master's Candidate in Computer Science at Universitas Gadjah Mada with a Statistics background, focused on NLP, machine learning, dashboards, and interpretable data products. Bridging statistical thinking with applied AI for education, public data, environmental analysis, and decision support.

---

## Education

**Universitas Gadjah Mada – Master of Computer Science** | *Feb 2025 – Expected Jan 2027*

Focus: AI, NLP, Data for Social Good

**Universitas Tadulako – Bachelor of Statistics** | *Jul 2018 – Jun 2022*

Graduated with Beasiswa Unggulan | GPA: 3.70

---

## Experiences

**Presenter – ICETT 2026 (12th International Conference on Education and Training Technologies)** | *Seoul, South Korea, May 2026*

- Presented research: "Intelligent Two-Stage Ensemble Framework for Early Detection and Intervention of At-Risk Students"
- Published in IEEE Proceedings, indexed by Scopus and Ei Compendex

**AI Talent Indonesia (AITF) Komdigi and UGM – Participant** | *2026 – Present*

- Selected as participant in a national AI talent development program focused on advancing AI capabilities in Indonesia

**DCSE Summer Course 2025 – Project Assessor** | *Jul – Aug 2025*

*DIKE Universitas Gadjah Mada (Online)*

- Assessed project outcomes and final presentations of participants in the course "AI and Robotics in Society 5.0"
- Provided structured evaluation and feedback across student projects from multiple universities

**International Student Mobility UGM–UiTM Community Service Program – Participant** |

*Juni 2025 - Universiti Teknologi MARA (UiTM), Malaysia*

- Selected to represent Universitas Gadjah Mada in a joint international mobility program with UiTM Malaysia
- Engaged in academic activities and cross-cultural community service collaboration

### **DQLab – Data Science Mentor** | Jun 2022

- Mentored participants in programming and machine learning tools
- Supported technical skill-building and project feedback

### **Student Mentor – BTW Edutech** | 2022 – 2024

- Developed structured materials and guided learners in quantitative reasoning, logical analysis, and problem decomposition

### **Data Analytics Intern – Badan Pusat Statistik** | 2021

- Supported data cleaning, validation, descriptive statistics, tabulation, and socioeconomic reporting

---

## **Community Leadership & Initiatives**

### **Founder & Facilitator – Komunitas Belajar TOEFL Palu (TTEW)** | Dec 2022 – Present

- Built a learning community to help students and job seekers improve English and prepare for TOEFL
- Mentored 50+ members with varying English proficiency levels

### **Founder & Facilitator – Komunitas Data Sains Palu (Intelekta)** | Jun 2023 – Dec 2023

- Established a data science community to support beginners in Python, machine learning, and data analytics
- Organized offline discussions, collaborative projects, and peer mentoring

---

## **Skills**

- Core: Python, R, SQL
- AI & Analytics: NLP, Text Mining, Machine Learning, Interpretable AI (SHAP)
- Data Visualization: Tableau, Dashboarding, Streamlit
- Soft Skills: Project Assessment, Mentoring, International Mobility Facilitation

---

## **Honors & Awards**

- Bronze Medal, 5th International Youth Summit (IYS) 2026 – International Essay Competition (Sentosa Foundation x Universiti Putra Malaysia, Malaysia) "*Bridging the AI Policy Gap: How Youth Innovation and Multilateral Literacy Can Shape Inclusive Global AI Governance*"
- Silver Medal, IJMCSII 2022 – International Jasin Multimedia & Computer Science Invention and Innovation Exhibition (UiTM Malaysia)
- The 2nd Most Outstanding Student, Faculty Level
- Best Presenter, National Workshop

---

## **Publications & Projects**

- "Shapley Additive exPlanations-Integrated Convolutional Neural Networks for Chemically Interpretable Fourier-Transform Infrared-Based Microplastic Characterization" (ACS Analytical Chemistry, Q1)
- At-Risk Student Detection Framework: Intelligent two-stage ensemble approach for early detection and intervention of at-risk students, presented at ICETT 2026, Seoul (IEEE)

- Detikcom News Topic Modeling: Applied LDA topic modeling to Indonesian online news titles to uncover trends in large-scale text data (ESTIMASI Journal)
  - Earthquake Risk Web App & Dashboard: Built a classification web app and dashboard for potential earthquake regions in Central Sulawesi (PDKI Copyright)
  - Dengue Fever Analytics Dashboard: Developed a Tableau-based dashboard to monitor dengue fever trends across Central Sulawesi districts, visualizing multi-year health data
- 

### **Languages**

- Bahasa Indonesia (Native)
- English (Professional Working Proficiency)