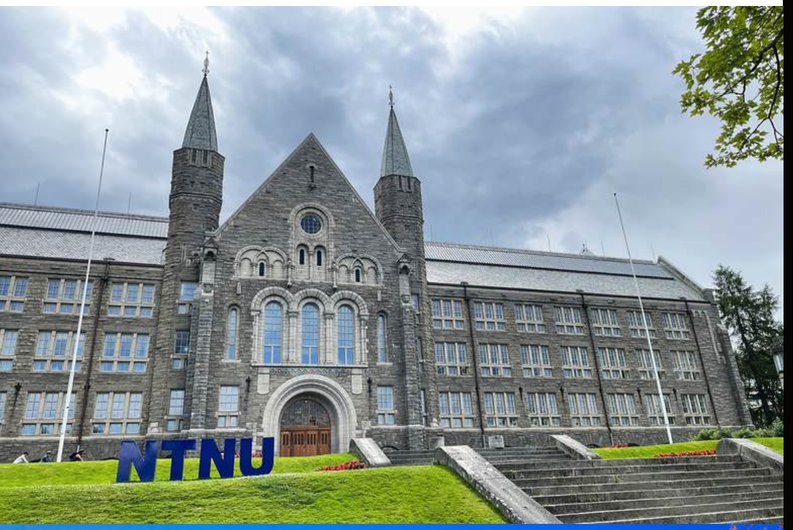
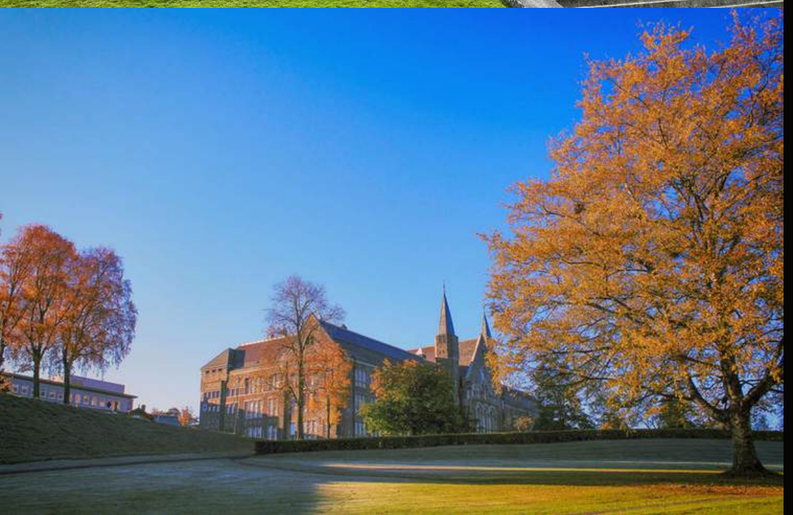
NTNU

Norwegian University of Science and Technology



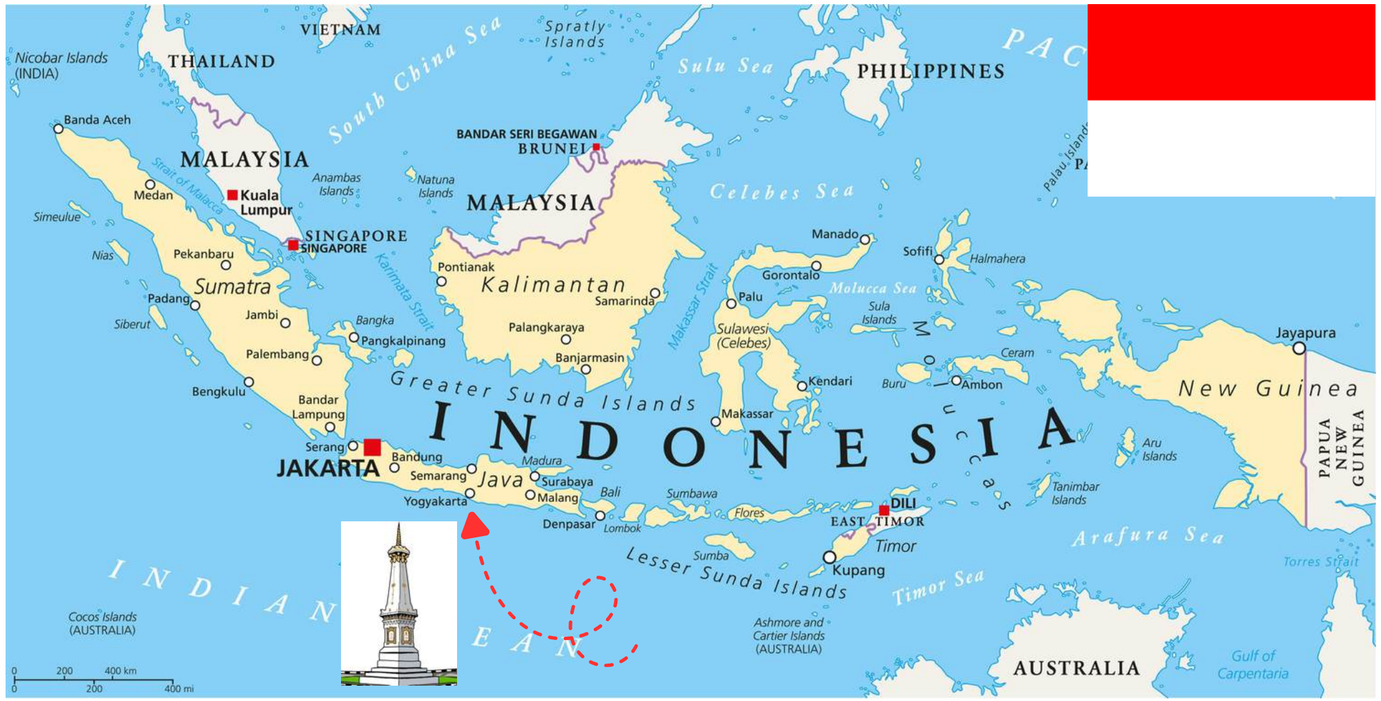


PHD CANDIDATE

DINA TRI UTARI

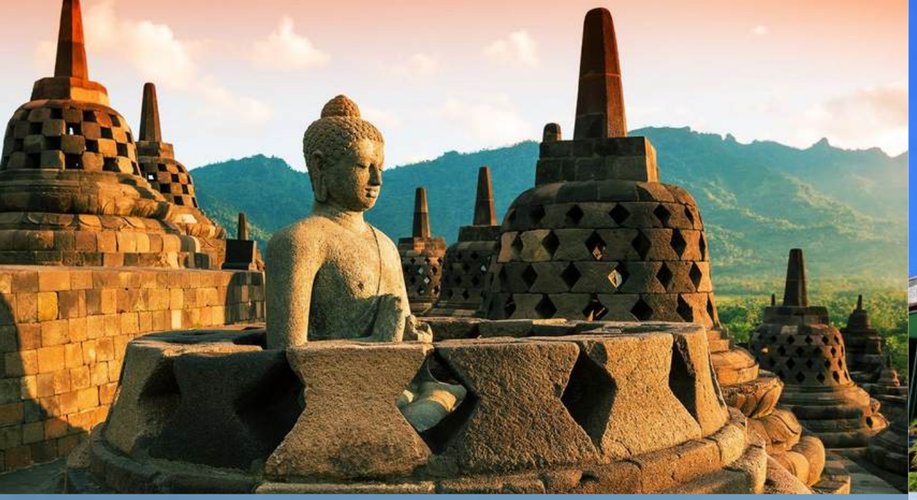
Department of Mechanical and Industrial Engineering,
NTNU

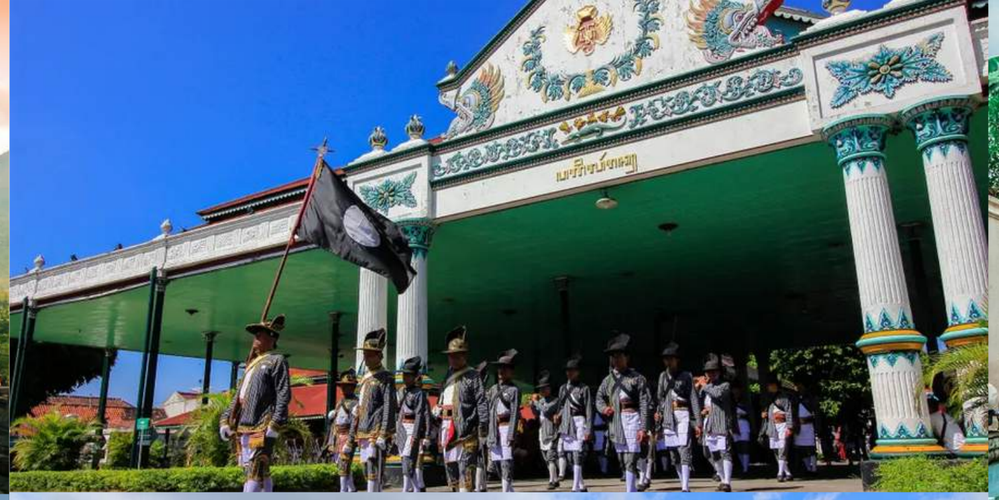
COUNTRY OF ORIGIN

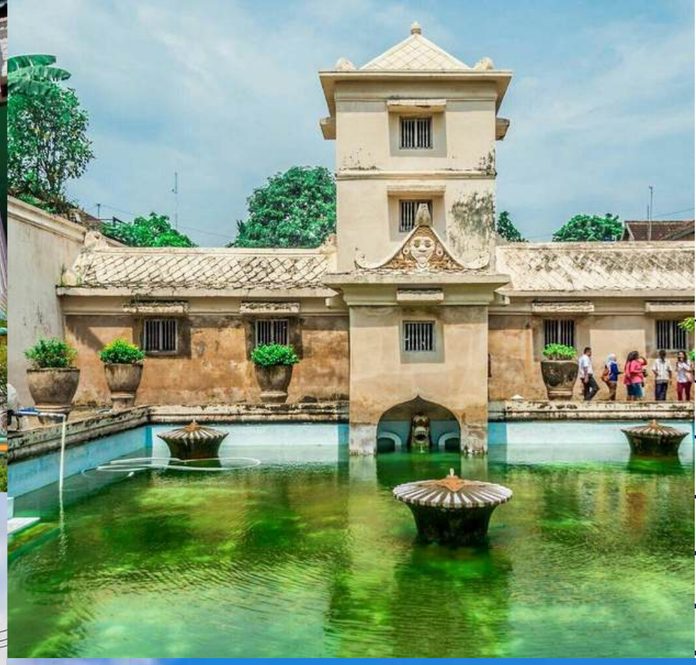


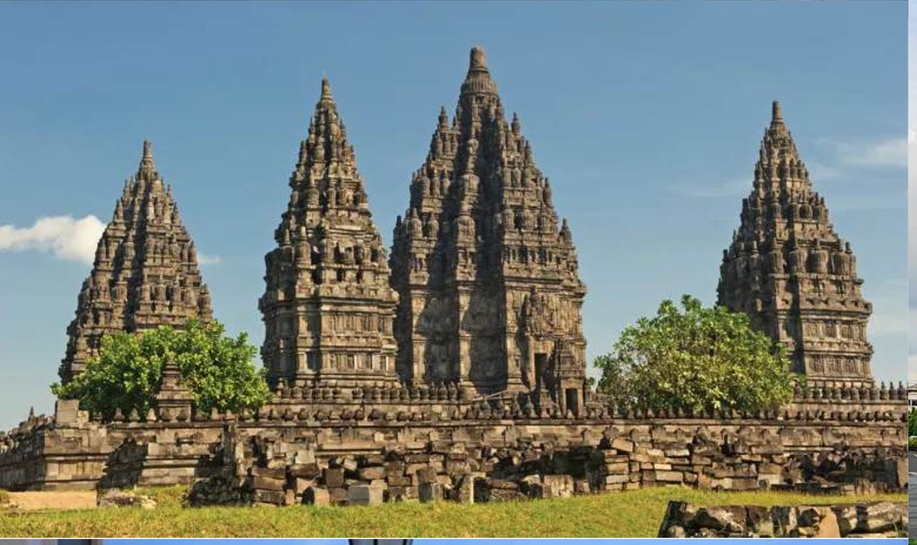
From the city of **Special Region of Yogyakarta—historical loyalty to Indonesia, deep cultural roots, and unique system of governance** led by the *Sultan*.

Also known as *Kota Pelajar* (City of Education); home to many top universities.

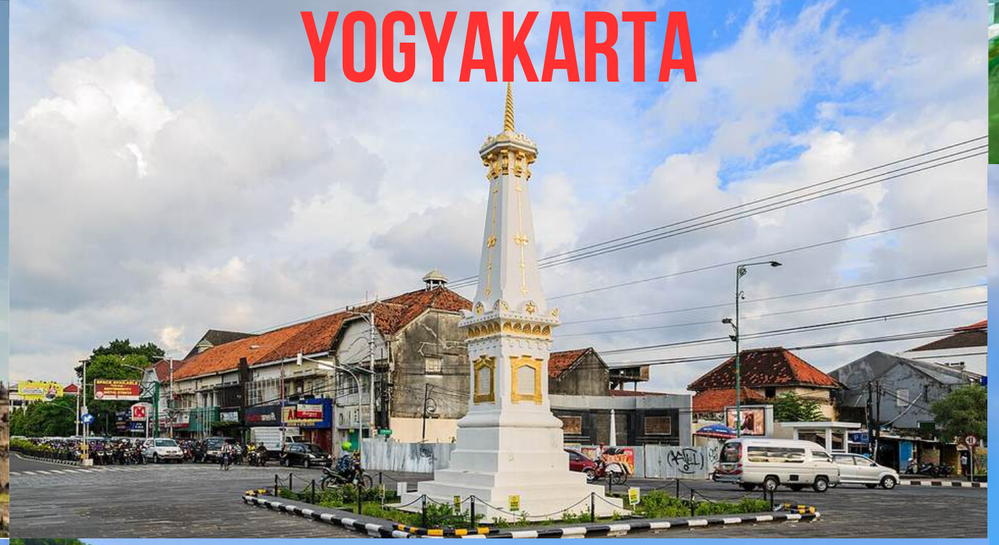


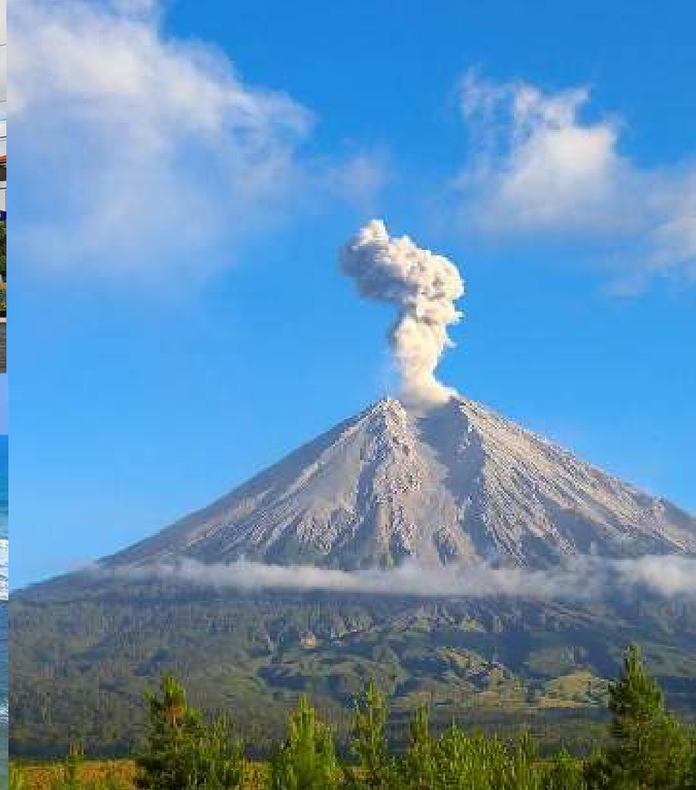


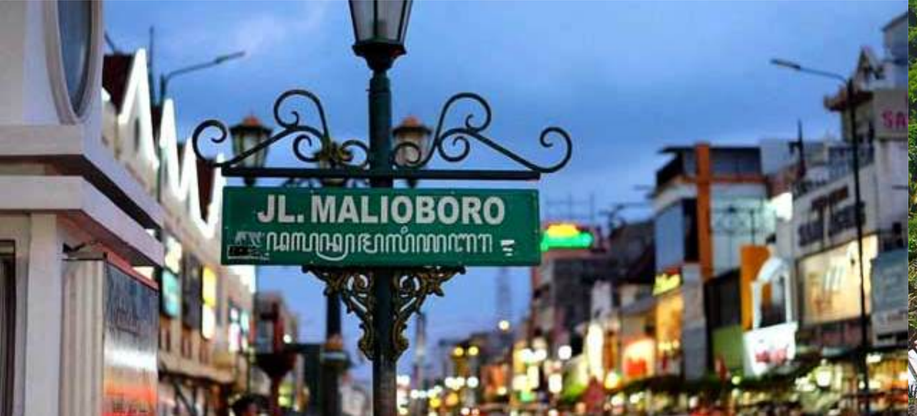


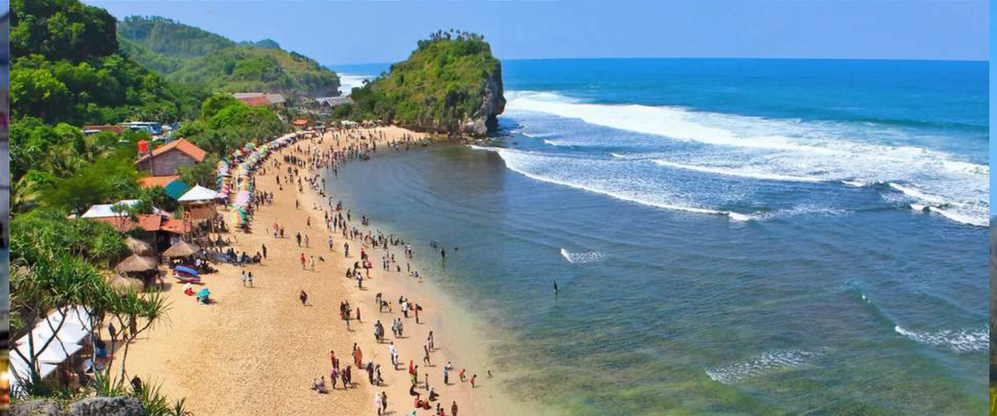


YOGYAKARTA









Educational Background

Norwegian University of Science and Technology 2025-present
PhD

RAMS/ Department of Mechanical and Industrial Engineering

Universitas Gadjah Mada 2014-2016
MSc

Mathematical Statistics/ Department of Mathematics

Universitas Jenderal Soedirman 2009-2013
BSc

Mathematical Statistics/ Department of Mathematics

Working Experience

Universitas Islam Indonesia I Department of Statistics
Full-time position as Lecturer (Assistant Professor)
2017-present

Academic Excellence and Social Contribution


Teaching → Developing knowledge


Research → Creating innovation


Community Service → Sharing impact


Academic and Professional Development

Technical Skills

Languages: R, Python, Tableau

RESEARCH & SCIENTIFIC CONTRIBUTIONS

- Total Publications: **40 research papers**
- **Scopus-Indexed Papers: 20**
- **h-index (Scopus): 3**
- **Research Fields:** Artificial Intelligence, Machine Learning, Data Science, and Applied Statistics

THE MAIN PUBLICATIONS:

- Utari, D.T., Hendradewa, A.P., Bella, M.A. (2025). Optimized YOLO Approach for Drowsiness Detection in Automotive Safety: Parameter Tuning and Facial Expression Analysis.
- Maharani, S., Utari, D.T. (2024). Transfer Learning-Based Skin Tumor Identification Improvement.
- Utari, D.T., Yotenka, R., Ashim, P.F. (2024). Optimized Ensemble Learning Based on Genetic Algorithms and R-Shiny App for Early Detection of Preeclampsia.
- Salam, F.B., Utari, D.T. (2024). Schizophrenia Patient Classification with Long Short-Term Memory Analysis of Electroencephalography Signals.
- Ummah, F.R., Utari, D.T. (2022). Covid-19 and Tuberculosis Detection in X-Ray of Lung Images with Deep Convolutional Neural Network.

DOCTORAL RESEARCH

Enhancing Trustworthy AI Integration in Safety-Critical Systems

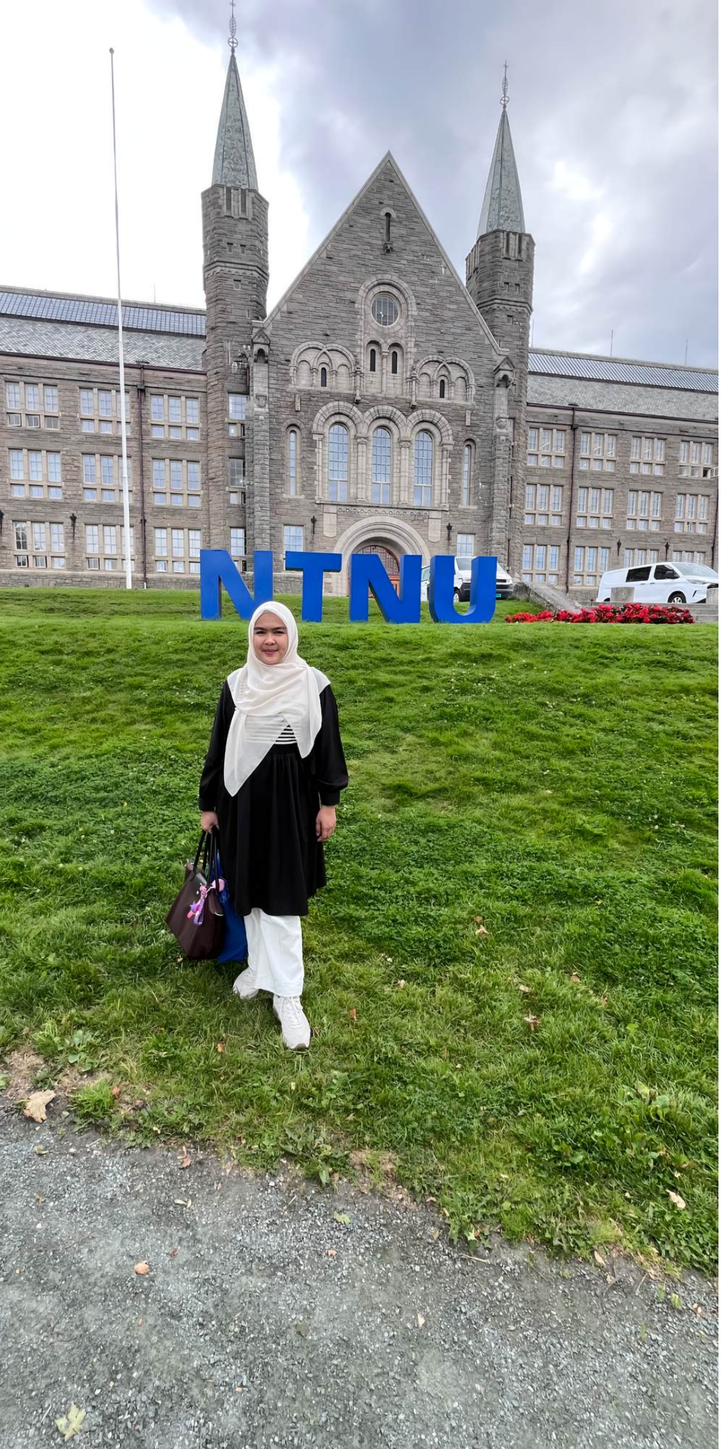
PhD Supervisor: Prof. Shen Yin

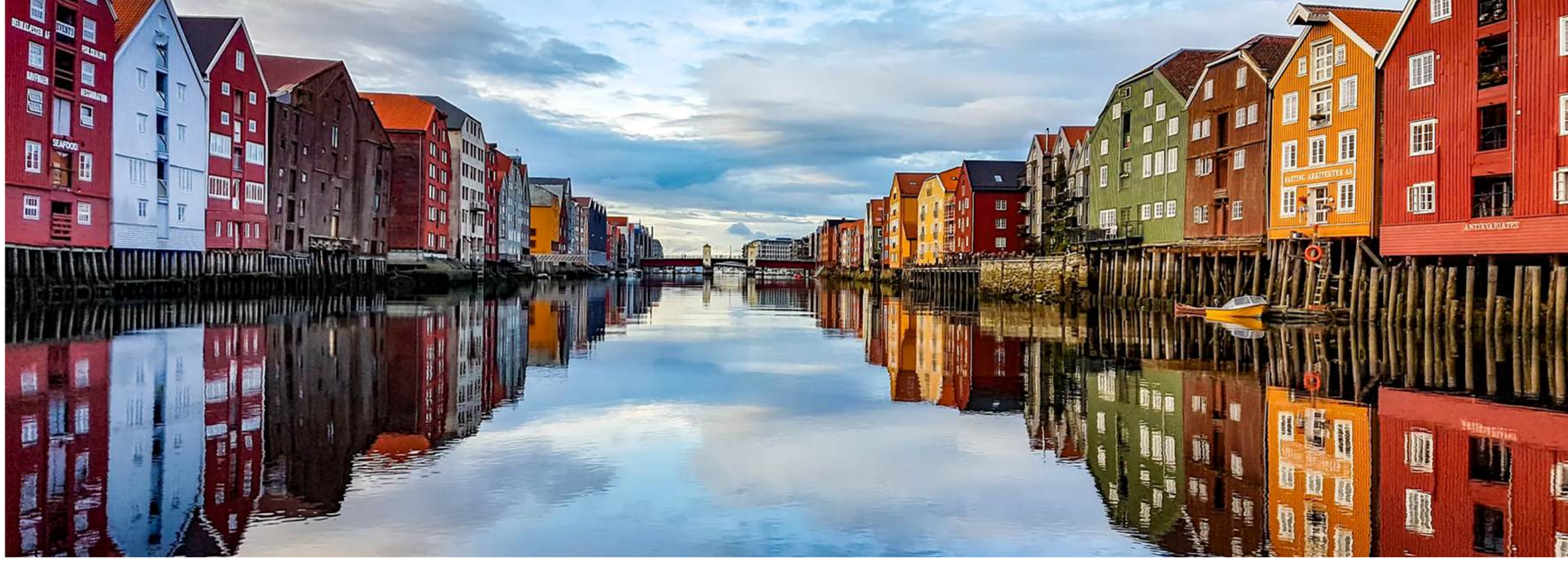
- Rapid adoption of **AI in safety-critical systems** (e.g., cyber-physical electricity system).
- **AI decisions** often lack transparency and accountability.
- Growing need for **trustworthy and explainable AI** that aligns with ethical and legal standards.
- This project addresses how to integrate **AI safely and responsibly** into real-world applications.

“Trustworthy AI is not only about accuracy — it’s about accountability, transparency, and reliability in systems that affect human lives.”

TERIMA KASIH

THANK YOU





Contacts

Email: dina.t.utari@ntnu.no
LinkedIn: https://www.linkedin.com/in/dina-tri-utari-702478134/
ORCID: https://orcid.org/0009-0000-8489-8062
Google Scholar: https://scholar.google.com/citations?user=wuvNJcwAAAAJ&hl=en&oi=ao
Scopus: https://www.scopus.com/authid/detail.uri?authorId=57203145918