

# Maria Adelia Widijanto

## EDUCATION

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### **ERASMUS MUNDUS JOINT MASTERS in GLOBAL FORESTRY** 2023 – 2025 (*on-going*)

University of Copenhagen, Department of Food and Resource Economics  
AgroParisTech, Environmental Management Research Unit  
Technische Universität Dresden, Chair of Tropical and International Forestry

### **BANDUNG INSTITUTE OF TECHNOLOGY** 2017 – 2021

Bachelor of Science in Biology (Cum Laude) | GPA: 3.75/4.00

**Final Project:** Modelling Tropical Forest Ecosystem Growth in Response to Rising Temperature using LANDIS-II Forest Landscape Model

*The final project was presented at 14th International Symposium of IWORS, August 4, 2022*

## PROFESSIONAL RESEARCH EXPERIENCE

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### **CIFOR – ICRAF Indonesia**

#### ***Natural Resources Management Tool Development Assistant*** December 2021 – August 2023

- Developed natural resources management tool (LUMENS) using QGIS, R, Python, and SQL
- Created scenarios for ex-ante land-use analysis, focusing on carbon accounting, land-use change, profitability analysis, and regional economics
- Conducted comprehensive data analysis for technical project reports

#### ***Casual Staff*** March – September 2021

- Developed a database of eco-physiological data on potential shade tree species.

#### ***Internship*** July – September 2020

- Supported the development of ICRAF's carbon accounting tool using VBA Macro Excel

### **Forestry Research and Development Agency (FORDA), Indonesian Ministry of Environment and Forestry**

#### ***Casual Staff*** November 2021 – January 2022

#### **Project:** Kannopi Phase 2

Contributed to knowledge management for project reports and publication outputs in the development and promotion of market-based agroforestry options and integrated landscape management for smallholder forestry in Indonesia

### **World Resources Institute Indonesia**

#### ***Data Acquisition and Quality Control Technical Staff*** October – November 2021

#### **Project:** Riau's Tree Adoption

Assisted in the development of an online platform for a local government initiative in Riau Province, aimed at creating a financial scheme for forest conservation by engaging local communities through the social forestry program

- Analyzed forest deforestation, carbon stock, and fire probability using GIS (Google Earth Engine).
- Developed an interactive web map using HTML and Python.

### **Senckenberg Research Institute**

#### ***Research Assistant*** December 2020 – December 2021

#### **Project:** The Role of Culture in Early Expansions of Humans (ROCEEH)

Developed a structured database of Java plant species characteristics (PlantBITES) using MS Access

## **Indonesia's Peatland Restoration Agency**

### ***Mapathon Participant***

*July 2020*

Mapped the canal at the peatland area around Sebangau River, Central Kalimantan using OpenStreetMap for peatland monitoring platform development (PRIMS)

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## **AWARDS**

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### **IFSA's Blog Competition for the IUFRO World Congress XXVI**

*2024*

3<sup>rd</sup> Place Winner

Authored an essay titled "The Silent Struggle: Why Forest Modeling Needs a New Generation of Experts," advocating for specialized education and effective science communication in forest modeling.

### **UIN Sunan Gunung Djati National Scientific Research Competition**

*2020*

3<sup>rd</sup> Place Winner

Designed a wildlife corridor prototype for Sumatran elephants in Tesso Nilo National Park using Google Earth Engine

### **Institut Pertanian Bogor's Essay Competition**

*2020*

1<sup>st</sup> Place Winner

Authored an essay titled "Revealing the Potential of Indonesia's Maritime Natural Resources," emphasizing sustainable resource management in Indonesia's maritime sector

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## **TECHNICAL SKILLS**

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- GIS: : ArcGIS/QGIS, Google Earth Engine
- Programming language : R, Python
- Ecosystem/land-use models : Dinamica EGO, LANDIS-II, CO<sub>2</sub>Fix, InVEST
- Version control and collaborative projects : GitHub