

Robiah AL WARDAH

Geophysicist · CAT Modeler · Earth Scientist · Risk Analyst

✉ robiah.alwardah@gmail.com

Education

UGM (Universitas Gadjah Mada)

Yogyakarta, Indonesia

Bachelor of Science in Geophysics, Master in Geophysics

2010 - 2015, 2016 - 2019

- Bachelor Thesis: Wavelet denoising of Merapi phreatic eruption data from Kaliurang station.
- Master Thesis: Automatic analysis of acoustic signals: use of supervised learning tools with Random Forest algorithm.
- Master degree: in trial double degree with UGA (Université Grenoble Alpes), France.

UGA (Université Grenoble Alpes)

Grenoble, France

Master in Geophysics

2017 - 2018

- Thesis: automatic analysis of environmental signals: the use of supervised learning tools.

Skills

Programming Python, R, MATLAB, LaTeX, Octave.

Languages Bahasa Indonesia, English, Javanese, Korean, French

Other QGIS, Geopsy, OpenQuake, Geosoft - Oasis montaj, CorelDRAW, Adobe After Effects

Experience

AXA Climate

Paris, France

CAT Modeler & Risk Analyst

Feb. 2020 - Oct. 2020

- Build internal pricing tools (WebUI application) for earthquake parametric protection by optimizing the earthquake catalogue treatment.
- Supported the underwriters to do the risk & hazard assessment for the earthquake perils.

KLK Group

Riau, Indonesia

GIS (Geographic Information System) Management Trainee

Nov. 2018 - Dec. 2018

- Participated in in-house training program, project assignments (e.g. GIS mapping with UAV/drones) and hand-on estate operations across palm oil estate.

GIPSA-Lab

Grenoble, France

Image-Signal Trainee/Intern

Feb. 2018 - Jul. 2018

- Analyzed data science: automatic analysis of environmental signals (use of supervised learning tools). Continuous analysis of acoustic underwater data (application on fish data).

IRD (Institut de Recherche pour le Développement)

Yogyakarta, Indonesia

Research Assistant

Aug. 2015 - Aug. 2017

- Supported research in Domerapi project. Participated in the deployment of seismic networks around the Opak fault, Yogyakarta.
- Processed Merapi earthquake data for the period of October 2013 - May 2015.
- Established partnership between UGA, IRD and UGM.

Geophysics Lab UGM

Yogyakarta, Indonesia

Field Assistant

Sep. 2014

- Assisted the professors to supervise trainees/students on how to operate Geophysical instruments and Geophysical data acquisition on the field, process the data and how to present the result in between the peers and the public audiences.

PT Elnusa Tbk

Jakarta, Indonesia

Seismic Data Processing Trainee

Dec. 2013 - Dec. 2013

- Processed oil and gas data up to Pre-Stack Time Migration using Geocluster and GMG software.

Geoseismal

Yogyakarta, Indonesia

Research Assistant

Sep. 2013, Mar. 2011 - Oct. 2011

- Processed earthquake data to provide input in seismic hazard assessment in nuclear power plant site study in Bangka (2012).
- Processed and analysed microearthquake data at Rajabasa geothermal field (2011).

Apkomindo DIY

Yogyakarta, Indonesia

Event Organizer

Jan. 2011 - Oct. 2013

- Provided ticket for the IT exhibition's visitor, assigned to check list for the IT store's items (2011-2012).
- Coordinated the ticketing teams, managed the financial activities for the exhibition (2013).

Field Experience

Pre-Doctoral School

Les Houches, France

Participant

Oct. 2017

- Workshop on Internal Earth, approached from various discipline e.g. geochemistry, geodynamics, seismology and geology.

Non-Seismic Field Workshop

Pacitan, Indonesia

Participant, Assistant

Sep. 2013, Sep. 2014

- Geophysical data acquisition using Gravity, Magnetic, AMT (Audio-Magneto Telluric), Resistivity, IP (Induced Polarization), SP (Self Potential), GPS (Global Positioning System), and VLF (Very Low Frequency) to observe mineralized (mineral deposit) zone around Pacitan.
- 2014 - Assisting the professors to supervise the students on geophysical data acquisition, processing and interpretation using Resistivity method.

Geophysical Field Workshop

Ungaran, Indonesia

Participant

Jun. 2014

- Geophysical Data Acquisition using Gravity, Magnetic, AMT (Audio-Magneto Telluric), Resistivity, IP (Induced Polarization), SP (Self Potential), GPS (Global Positioning System), VLF (Very Low Frequency), Seismic (Passive) to observe geothermal prospect in the area.

Physical Volcanology Field Trip

Kamojang, Indonesia

Participant

Jan. 2014

- Geophysical Data Acquisition using Gravity, Magnetic, (Audio-Magneto Telluric, Resistivity, Subsurface Temperature Measurements, Self Potential, GPS, VLF (Very Low Frequency), Seismic (Passive) to observe geothermal prospect in the area.

Geophysics Expedition

Indonesia

Magnetic Team, Committee

2011, 2012

- 2011 - Cepu, Central Java : Geophysical Data Acquisition using Magnetic to image anomalies in the oil field's subsurface.
- 2012 - Kulon Progo, Central Java : Being the committee enable me to experience all geophysical acquisition methods used (e.g. Gravity, Magnetic, AMT (Audio-Magneto Telluric), Resistivity, IP (Induced Polarization), SP (Self Potential), GPS (Global Positioning System), VLF (Very Low Frequency), Seismic (Passive)).

Mapping Fieldwork

Yogyakarta, Indonesia

Participant

2012

- Acquired spatial data information around UGM campus area using theodolite.
- Sketch the map based on the information obtained, presented and wrote the reports.

Petrology Field Trip

Klaten, Indonesia

Participant

Oct. 2011

- Observed rocks around the area to understand the genesis, structure and composition of the rocks and wrote the reports.

Geological Mapping Field Trip

Bayat, Indonesia

Participant

2011

- Collected geological & petrological information to identify Indonesia's oldest rock area and presented the results.

Structural Geology Field Trip

Sragen, Indonesia

Participant

2011

- Observed and identified faults and other geological structures around the observed area and wrote the reports.

Teaching Experience

2014	Field Asistant	<i>UGM, Indonesia</i>
2013	Lab. Scale Geophysical Data Acquisition	<i>UGM, Indonesia</i>
2013	Basic Physics - 2 Lab. Assistant	<i>UGM, Indonesia</i>
2012	Basic Physics Lab. Assistant	<i>UGM, Indonesia</i>

Presentation

The 41th Scientific Annual Meeting of Indonesian Association of Geophysicists

Lampung, Indonesia

Professional Presenter

Oct. 2016

- Presented Domerapi Project (under IRD) and my contribution to this project