

Viet Nguyen

Geospatial Analyst

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📄 <https://vietducng.github.io/>

🌐 Vietnamese

📅 30.05.1997 (He/ Him/ His)

👤 www.linkedin.com/in/vietdn

🔗 <https://github.com/VietDucNg>

Work experience

11/2023 - current
Greifswald, DE

Geoinformatician

Institute of Geography and Geology, University of Greifswald

- Collecting, processing, managing, and visualizing Geo-data
- Spatial analysis with Python, R
- Photogrammetry with Metashape
- WebGIS applications

05/2022 - 08/2023
Eberswalde, DE

Scientific Assistant on GIS and Remote Sensing in

Land-use land-cover classification, crop type mapping ([TRANSECT](#) project)

Centre for Ecnics and Ecosystem Management, Eberswalde University

- Researched classification methods using machine learning and time-series analysis
- Collected and digitized on-screen training and validation data
- Interpreted multi-temporal remote sensing metrics (e.g., NDVI, NRPB, VV, VH)
- Implemented random forest algorithm using Landsat 8, Sentinel 1, and Sentinel 2 in Google Earth Engine. Achieved 91% overall accuracy of crop type classification in central Asia
- Created results of maps, figures, and tables using R and QGIS/ArcGIS and quality assurance

03/2022 - 04/2022
Lübeck, DE

Student assistant in **Terrestrial laser scanning** ([PYROPHOB](#) project)

Naturwald Akademie

- Planned and prepared for TLS campaigns
- Performed TLS measurements in 45 forest plots in Brandenburg

10/2021 - 05/2023
Eberswalde, DE

Internship in

Forest inventory based on ALS point cloud on large-scale levels ([WINMOL](#) project)

Thünen Institute of Forest Ecosystems

- Investigated algorithms and packages for tree segmentations from LiDAR
- Tested different parameter settings for each algorithm
- Developed methods to derive individual tree attributes (coordinate, tree height (H), diameter at breast height (DBH), crown base height, crown area)
- Evaluated results statistically. 78% tree detection rate in North Rhine-Westphalia using AMS3D algorithm, 0.86 R² of tree height estimates, and 0.74 R² of DBH estimates

01/2021 - 08/2023

Scientific Assistant in **GIS and Remote Sensing** ([Virtual Forests](#) projects)

- Eberswalde, DE Faculty of Forest and Environment, Eberswalde University
- Taught the course “*Virtual Forest Twins based on Martelloscope point cloud data*” for a 2-days training program
 - Taught the course “*Forest Inventory and 3D Virtual Forest Twins*” for a 1-week summer school
 - Assisted teaching for statistics course
 - Created GIS maps with QGIS/ArcGIS
 - Analyzed statistics with R and Excel
 - Supported organizing workshops, and training
- 12/2018 - 09/2020 **Project Assistant**
Hanoi, VN Vietnam National University
[BioEcoN](#) project - Sustainable Bio-Economy
- Attended fieldwork for forest inventory
 - Attended staff training on sustainable bioeconomy management
 - Managed website with WordPress
 - Planned workshops, drafted reports

Education

- 10/2020 - 07/2023 **M.Sc.** in Forest Information Technology
Eberswalde University for Sustainable Development, Germany
Warsaw University of Life Science, Poland
- GPA: 1.0 (German grade)
- 09/2015 - 06/2019 **B.Sc.** in Soil Science
Vietnam National University, Hanoi, Vietnam

Professional training

- 2023 ***EnMAP data access and image preprocessing techniques***, EO College
- 2023 ***Introduction to Hyperspectral Remote Sensing***, EO College
- 2023 ***Automating GIS Processes***, University of Helsinki
- 2023 ***Geo-Python***, University of Helsinki
- 2023 ***Elements of AI***, University of Helsinki
- 2021 ***Getting started with Python***, University of Michigan
- 2021 ***Using Python to Access Web Data***, University of Michigan
- 2021 ***Python Data Structures***, University of Michigan
- 2021 ***Introduction to R***, DataCamp

- 2020 ***Sustainable Forest Management and Bio-Economy***
 Summer school with 5 courses at University of Valladolid, Spain
 Aboveground Biomass Assessment | GIS, Remote Sensing and Photogrammetry
 | Forest Inventory | Agroforestry Landscape | Sustainable Forest Management

- 2019 ***Sustainable Forest Management and Bio-Economy***
 Summer school with 5 courses at Vietnam National University of Forestry, Vietnam
 Dynamic System Modeling | Multifunctional Forestry | Forest Resource
 Economics | Environmental Economics Chances & Challenges | Climate Change
 & Ecosystem Services

Skills and License

GIS	QGIS, ArcGIS, Google Earth Engine
Programming	R, Python, SQL
Database	PostgreSQL, PostGIS
Digital skills	Microsoft Office, Git, GitHub, Data Management
License	EU Drone License A1-A3

Other skills

Soft skills	Growth mindset, critical thinking, cultural awareness, communication
Languages	Native Vietnamese, C2 English, A2 German

June 2024
Viet Nguyen