# **Eya Cherif**

I am a PhD candidate at Leipzig University. My PhD project is at the interface of remote sensing of vegetation and machine learning. I am particularly interested to explore Deep Learning techniques using hyperspectral data for vegetation properties estimation.

#### Education

June 2021 – Present Leipzig University, Germany

PhD Candidate in Physics and Earth sciences

October 2018 – January 2021 University of Passau, Germany

Master of Science in Computer Science

Double degree program with Erasmus+ scholarship

September 2016 – January 2021 Higher School of Communication of Tunis

(SUPCOM), Tunisia

Engineering Degree in ICT

Double Degree Program in Telecommunication

Systems (Systel)

September 2014 – June 2016 University of Tunis El Manar, Tunisia

Undergraduate Diploma in Mathematics and Physics
Ranked 143/2280 in the national entrance examination

to engineering schools

## **Practical Experience**

June 2021 – Present Scalable Data Analytics and Artificial Intelligence

Center (ScaDS.AI) and Remote Sensing for Earth System Research (RSC4Earth), Leipzig, Germany

Researcher

February 2024 – June 2024 Mila - Quebec AI Institute, Canada

Research Intern

May 2020 – December 2020 Esri Deutschland GmbH, Germany

Master Thesis -Intern

November 2019 – May 2020 Quicket GmbH, Germany

Working Student

June 2018 – August 2018 Standard Sharing Software (3S), Tunisia

Engineering Intern

### **Scientific Publications**

- Mederer, D., Feilhauer, H., **Cherif, E.**, Berger, K., Hank, T. B., Kovach, K. R., ... & Kattenborn, T. (2025). Plant trait retrieval from hyperspectral data: Collective efforts in scientific data curation outperform simulated data derived from the PROSAIL model. *ISPRS Open Journal of Photogrammetry and Remote Sensing*.
- Cherif, E., Feilhauer, H., Berger, K., Dao, P. D., Ewald, M., Hank, T. B., ... & Kattenborn, T. (2023). From Spectra to Plant Functional Traits: Transferable Multi-Trait Models from Heterogeneous and Sparse Data. *Remote Sensing of Environment*.
- Cherif, E., Hell, M., & Brandmeier, M. (2022). DeepForest: Novel Deep Learning Models for Land Use and Land Cover Classification Using Multi-Temporal and Modal Sentinel Data of the Amazon Basin. *Remote Sensing*.

### **Scholarships & Awards**

- Finalist EARSeL Young Scientist Award Poster Presentation (2022, Germany)
- **STIBET Scholarship** DAAD (2019, Germany)
- **Finalist (Top 8 teams)** Atos IT Challenge: Machine Learning for Sustainability (2019, Germany)
- **Erasmus+ Scholarship** (2018, Germany)

#### **Technical Skills**

- Languages: Python, MATLAB, C, C++
- Machine Learning: PyTorch, TensorFlow/Keras (Coursera-certified)
- Containerization & Deployment: Docker (Nvidia NCG)
- Databases: SQL, Neo4j, MongoDB
- **GIS Tools:** QGIS, ArcGIS Pro (Esri-certified in Spatial Data Science)
- Satellite Data Processing: Sentinel-2 (Multispectral), Hyperspectral Data
- Azure Microsoft certificated: Azure Fundamentals

### Languages

- German: B1English: B2
- French: C1
- **Arabic:** C2 (Native speaker)

### **Conferences & talks**

**08/2025** – **Invited talk** at the Rolnick Lab at Mila (Remote)

**06/2024** – **Invited talk** at the Plant Functional Ecology Lab of the Université de Montréal (Montreal, Canada)

06/2024 – Represented the TEECube project at the CEOS Workshop on Biodiversity (UN CBD, Montreal, Canada)

**09/2023** – **Volunteer and conference talk** at GFÖ23 (Session 55: Mapping of Plant Traits) (Leipzig, Germany)

**04/2023** – **Conference talk** at EGU23 (Session BG9.4: Large-scale mapping of continuous environmental variables by combining ground observations, remote sensing and machine learning) (Vienna, Austria)

08/2022 - ELLIS Doctoral Symposium 2022 - Poster presentation (Alicante, Spain)

06/2022 – EARSeL Workshop 2022 – Pitch Talk (Potsdam, Germany)

04/2022 – Living Planet Symposium 2022 – Poster presentation (Bonn, Germany)

11/2019 – Gastrohackathon 2019/2020 – Participant (Salzburg, Austria)

#### **Personal Interests**

- Music Diploma
- Chorbeau German-French Choir