

EUFAR TRAINING COURSE

RS4forestEBV

**Airborne remote sensing for monitoring
essential biodiversity variables in forest ecosystems**

**Bavarian Forest National Park and German Aerospace Center
Oberpfaffenhofen, Germany
From 3 to 14 July 2017**



STUDENT PHOTOBOOK



HAIDI ABDULLAH

H.J.ABDULLAH@UTWENTE.NL

NATIONALITY: Iraqi

INSTITUTE, CITY/TOWN, COUNTRY: ITC- University of Twente , Enschede - The Nederland

EDUCATION: PhD

RESEARCH EXPERIENCE:

"My research experience include analysis and exploration of hyperspectral, multispectral, thermal data with applications in forestry, and urban area"



PAULINA BARTKOWIAK

PAULINA.BARTKOWIAK@PW.EDU.PL

NATIONALITY: Polish

INSTITUTE, CITY/TOWN, COUNTRY: Warsaw University of Technology, Department of Photogrammetry, Remote Sensing and GIS, Warsaw, Poland

EDUCATION: Master of Science

RESEARCH EXPERIENCE:

First Stage Researcher



SEBASTIAN BÖCK

SEBASTIAN.BOECK@BOKU.AC.AT

NATIONALITY: Austria

INSTITUTE, CITY/TOWN, COUNTRY: Institute of Surveying, Remote Sensing and Land Information (IVFL, BOKU) Vienna, Austria

EDUCATION:

> Institute of Surveying, Remote Sensing and Land Information (IVFL)

> University of Natural Resources and Life Sciences (BOKU), Vienna, Austria

RESEARCH EXPERIENCE:

Research Associate at Institute of Surveying, Remote Sensing and Land Information (IVFL), Vienna



SAM COOPER

COOPERSA@GEO.HU-BERLIN.DE

NATIONALITY: American

INSTITUTE, CITY/TOWN, COUNTRY: Humboldt-Universität zu Berlin, Germany

EDUCATION:

- > MS – Geography - South Dakota State University
- > BS – Ecology - South Dakota State University
- > BA – Global Studies - South Dakota State University

RESEARCH EXPERIENCE:

- > Biomass assessment using terrestrial laser scanning and terrestrial photogrammetry
- > Vegetation mapping using airborne and simulated spaceborne hyperspectral imagery



DARÍO DOMINGO

DDOMINGO@UNIZAR.ES

NATIONALITY: Spain

INSTITUTE, CITY/TOWN, COUNTRY: University of Zaragoza, Zaragoza, Spain

EDUCATION:

- > PhD program in Land Management and Environment (Present). Dissertation : Estimation of forest structure parameters using Remote Sensing, active and passive sensors, and field work campaigns in the Aragón region (Spain)
- > Master´s degree in Geographic Information Technologies for Spatial Planning: GIS and Remote Sensing (06/10/2015)
- > Master´s Thesis: Estimation of Pinus halepensis Mill. dasometric variables using LiDAR data and field campaign
- > Bachelor in Geography and Spatial planning (10/07/2014)
- > Degree's Final Project: Study of environmental processes in burned hillsides of Pinus pinaster within the Moncayo natural park

RESEARCH EXPERIENCE:

"I currently hold a scholarship financed by the Government of Spain and I carry out my research work within the Geoforest-IUCA research group at the University of Zaragoza. So far, I have focused on the estimation of CO2 emissions in burnt Aleppo pine stands, the estimation of forest structure parameters and the characterization of structural changes after large fires within Mediterranean ecosystems. All of it using low point density LiDAR data, remote sensing images and field work. Before starting my PhD, I had a grant in the Spanish National Research Council so as to assess biodiversity dynamics and the effects of global change through the monitoring of indicator plants"



JUAN MIGUEL GIRALT RUEDA

GIRALTRUEDA@GMAIL.COM

NATIONALITY: Spanish

INSTITUTE, CITY/TOWN, COUNTRY: Spanish Research Council (CSIC), Madrid, Spain

EDUCATION:

- > BSc and MSc in Forestry and Natural Environment Engineering
- > MSc in Geographical Information Management. Currently PhD student

RESEARCH EXPERIENCE:

"Research assistant in projects on the Conservation Biology at the Doñana Biological Station, CSIC (Spain), Restoration Ecology (River Wensum Restoration Project at Cranfield University and Atkins Consultancy, UK), Agroforestry (AGFORWARD Project, Cranfield University and European Commission, UK) and Drought risk management (MARIUS Project at Cranfield University, UK). Currently, my research focuses on the monitoring of plant functional traits and water and energy fluxes between soil, plant and atmosphere by using proximal and remote sensing techniques"



SAM HISLOP

S.HISLOP@UTWENTE.NL

NATIONALITY: Australian

INSTITUTE, CITY/TOWN, COUNTRY: ITC, Enschede, The Netherlands

EDUCATION:

Bachelor of Geomatics, Bachelor of Information Systems, University of Melbourne, Australia

RESEARCH EXPERIENCE:

Currently undertaking a PhD in remote sensing, looking at Landsat time series



JINXIU LIU

JINXIU.LIU@HELSINKI.FI

NATIONALITY: Chinese

INSTITUTE, CITY/TOWN, COUNTRY: Department of Geosciences and Geography, University of Helsinki, Helsinki, Finland

EDUCATION: PhD student

RESEARCH EXPERIENCE:

Land use and cover change, time series analysis, texture analysis



PETER MORLEY

P.J.MORLEY@STIR.AC.UK

NATIONALITY: British

INSTITUTE, CITY/TOWN, COUNTRY: University of Stirling, Stirling, UK

EDUCATION:

> PhD (ongoing) Predicting changes in forest form and function in a high altitude tropical region

> MSc (2015) Ecology and Environmental Management

> BSc Hons (2012) Environmental Biology

RESEARCH EXPERIENCE:

"My background is in ecology looking at a range of topics including climate envelope modelling and investigating the role of microclimate in the distribution of high-altitude forest in the Ecuadorian Andes. I am currently studying in the second year of my PhD developing protocols in the use of remote sensing data for the assessment of biodiversity and ecosystem function in mountain regions. Through a combination of climate, ground-based and remote survey data, the project aims to identify geographic variation in forest range shifts, make predictions about future shifts and examine the impact that these changes are having on neighbouring ecosystems"



MICHAEL MUNK ANDERSEN

MUNK@BIOS.AU.DK

NATIONALITY: Danish

INSTITUTE, CITY/TOWN, COUNTRY: Bioscience, Aarhus, Denmark

EDUCATION: PhD Student

RESEARCH EXPERIENCE: 1 year



JÜRGEN NIEDBALLA

NIEDBALLA@IZW-BERLIN.DE

NATIONALITY: German

INSTITUTE, CITY/TOWN, COUNTRY: Leibniz Institute for Zoo and Wildlife Research, Berlin, Germany

EDUCATION: Diploma in Biology, just finished PhD work, Researcher

RESEARCH EXPERIENCE:

> PhD student in Junior Research Group Biodiversity and Biogeography of Southeast Asia at IZW Berlin

> Diploma thesis at Institute for Water Research, Rhodes University, Grahamstown, South Africa



TAWANDA WINMORE GARA

T.W.GARA@UTWENTE.NL

NATIONALITY: Zimbabwean

INSTITUTE, CITY/TOWN, COUNTRY: ITC, Enschede, Netherlands

EDUCATION: MSc, PhD (ongoing)

RESEARCH EXPERIENCE:

Intermediate



MATHEUS NUNES

MHNUNES1987@GMAIL.COM

NATIONALITY: Brazilian

INSTITUTE, CITY/TOWN, COUNTRY: University of Cambridge / Cambridge, UK

EDUCATION: Candidate in PhD in Plant Sciences

RESEARCH EXPERIENCE:

"I am a PhD student in the Forest Ecology and Conservation group within the Plant Sciences department at the University of Cambridge. The overarching aim of my research is to understand how forests are changing, within the context of global change, through investigating how environmental shifts may alter functional traits and carbon stocks via remote sensing. I am specifically developing the use of hyperspectral imaging on forest ecosystem in conjunction with airborne LiDAR in Malaysian Borneo to understand and provide insights on how ecological processes are affected by oil palm plantations in finer details and at large geographical scales.

I majored in Forest Engineering in the University of Lavras, Brazil, obtained a master's degree in Forest Management at the University of São Paulo, Brazil, and completed my studies in the Biometric and Spatial Analysis Lab at the University of California, Berkeley, as graduate scholar"



ANNE REICHMUTH

ANNE.REICHMUTH@DLR.DE

NATIONALITY: German

INSTITUTE, CITY/TOWN, COUNTRY: University of Würzburg / German Aerospace Center (DLR) Oberpfaffenhofen

EDUCATION:

> M. Eng. Geoinformation

> B. Sc. International Forest Ecosystem Management

RESEARCH EXPERIENCE:

> DLR Master Thesis (2012-2013): detection of forest parameters using imaging spectroscopy

> DLR Scientific Staff (2013-2014): VitTree Project, Treeldent

> ESA ESRIN German Trainee (2014-2015): Sentinel-2 for Agriculture, Global Forest Monitoring

> University of Würzburg PhD Student (2015-now): optimisation of EnMAP time-series for early detection of forest stress, detection of forest predisposition to stress using Landsat time-series



BJORN ROMBOUTS

BJORN.ROMBOUTS@KULEUVEN.BE

NATIONALITY: Belgian

INSTITUTE, CITY/TOWN, COUNTRY: KU Leuven, Leuven, Belgium

EDUCATION:

Master Bioscience engineering: earth observation & nature and forest management

RESEARCH EXPERIENCE:

> Remote sensing invasive plant species

> Forest satellite time series

> Thermal UAV measurements



YIFANG SHI

Y.SHI-1@UTWENTE.NL

NATIONALITY: Chinese

INSTITUTE, CITY/TOWN, COUNTRY: ITC, the Netherlands

EDUCATION: PhD student

RESEARCH EXPERIENCE:

No research experience



GIULIA TAGLIABUE

G.TAGLIABUE9@CAMPUS.UNIMIB.IT

NATIONALITY: Italian

INSTITUTE, CITY/TOWN, COUNTRY: University of Milano-Bicocca, Milano, Italy

EDUCATION: MSc in Sciences and Technologies for Environment and Landscape

RESEARCH EXPERIENCE:

"I am a PhD student at the Remote Sensing of Environmental Dynamics Laboratory of University of Milano-Bicocca, working on the exploitation of a new avenue for assessing vegetation photosynthetic efficiency from remote using canopy reflectance and sun-induced fluorescence measurements to detect changes in ecosystem functioning."

My research activities mainly regard the use of multi-source remote sensing data and techniques for investigating the links existing between vegetation optical properties, plant traits and ecosystem functional properties, with a particular focus on the use of airborne hyperspectral data to map forest species composition, plant traits and ecosystem functioning"



MICHELE TORRESANI

MICHELE.TORRESANI@NATEC.UNIBZ.IT

NATIONALITY: Italian

INSTITUTE, CITY/TOWN, COUNTRY: University of Bolzano/Bozen, Italy

EDUCATION:

> Bachelor and Master degree in Forest Environmental Science

> PhD student at the University of Bozen/Bolzano. Title of the thesis: "Detecting forest structural and species diversity by multi-source remote sensing data". Supervisors: prof. Giustino Tonon (University of Bolzano/Bozen), prof. Duccio Rocchini (University of Trento), dott. Marc Zebisch (EURAC institute Bolzano/Bozen)

RESEARCH EXPERIENCE:

> (2015) Researcher at the project "Lidar meets Crowdsourcing" co-funded by the COST ACTION TD 1202 (Mapping and the citizen sensor) at the University of Freiburg (Chair of Remote Sensing and Landscape Information Systems). Main supervisors: dott. Christian Schill and prof. Barbara Koch.

> (2013) Research collaboration at the Agricultural Research Council (Forest monitoring and management research center), Trento (Italy). Main topic: New methods to upgrade forest volume tables using LiDAR data. Main Supervisor: dott. Gianfranco Scrinzi



VILLEGAS GLADYS

GLADYSMARIA.VILLEGASRUGEL@UGENT.BE

NATIONALITY: Ecuatoriana

INSTITUTE, CITY/TOWN, COUNTRY: Gent University, Gent, Belgium

EDUCATION: PhD student

RESEARCH EXPERIENCE:

Remote sensing, Hyperspectral image, Fusion image



KATARZYNA ZIELEWSKA-BÜTTNER

KATARZYNA.ZIELEWSKA-BUETTNER@FORST.BWL.DE

NATIONALITY: Polish

INSTITUTE, CITY/TOWN, COUNTRY: Forest Research Institute Baden-Württemberg (FVA), Freiburg, Germany

EDUCATION:

> M.Sc. Forest Ecology and Management, Albert-Ludwigs University of Freiburg, Germany

> M.A. Geography, University of Lodz, Poland

RESEARCH EXPERIENCE:

> Mapping of forest gaps from digital surface models derived from aerial imagery.

> Mapping of deadwood and bark beetle outbreaks based on stereo aerial imagery and ortho photographs;

> Evaluation of forest dynamics after bark beetle outbreaks over time

> Habitat modeling in relation to forest structure parameters derived from remote sensing data;

> Development of scientific monitoring system for ecological changes in the riparian Lower Oder National Park. Forest nature conservation.

> Development of regional bio-energy register for sustainable development of European regions

> Mapping of energy resources, sinks and stakeholders



German
Aerospace Center

