# Ivan Palmegiani

ivan.palmegiani@gmail.com | **LinkedIn Account** | **GitHub Account**
Address and phone number available on request

## Profile

Researcher with strong analytical mindset and very good organization skills. Advanced technical capabilities developed over 5+ years working experience, and intensive training. Excellent communication skills. Team worker, also able to take charge of tasks individually. Highly motivated and positive towards challenges. Solution oriented and careful about details. Constructive critical thinker. Curious and eager to learn.

## Expertise

R coding | Python programming | Relational (geo)databases - MySQL and PostGreSQL | Geographic Information Systems - QGIS | Geodata analyses and modelling | Remote sensing | Time series analyses and forecast | Machine Learning (ML) | Data visualization | Data reporting | Research | Content writing

## Languages

English - IELTS certification level C1 • German - TELC certification level B1 • Italian - mother tongue • Spanish - fluent • Portuguese - fluent

# Professional Experience

**Independent Researcher | Environmental Data Scientist**, Nov 2019 - Present
Main clients: SmartCloudFarming GmgH (DE) | | EarthRatings UG (DE) | University of Primorska (SI)
Services: Spatial analyses and modelling - Geodatabase management - Geodata query - Remote sensing - Exploratory data analyses (EDA) - Feature Engineering - ML - Bibliographic research and reporting - Content crafting for funding applications and marketing - Consulting for nature conservation projects.

**PhD Candidate**, May 2014 - Jun. 2018 | **Research Assistant**, Apr. 2013 - Sept. 2013
IZW - Leibniz Institute for Zoo and Wildlife Research (DE)
Main goal: Investigating the social system of the cheetah in central Namibia by the analysis of individual movement patterns and utilization of space.

- Collected and processed time series of geo-referenced data from satellite telemetry.
- Performed spatial and movement analyses on tracking data.
- Explored data and modelled environmental dynamics with linear and nonlinear regression models.
- Collected and analyzed presence-absence data via camera-trap surveys.
- Designed and maintained online and offline (geo)databases.
- Provided insights to stakeholders, team members, and scientific audiences through public talks, data reporting and visualization.
- Coordinated data collection in the field, supervised volunteers.
- Organized scientific symposia.

**Research Assistant**, Dec. 2012 - Feb. 2013 | **Research Technician**, Feb. 2012 - Nov. 2012
CIBIO - Research Center in Biodiversity and Genetic Resources (PT)
Main goal: Investigating the spatial ecology of endangered wildlife species in the Iberian peninsula (Portugal and Spain).

- Collected and analyzed satellite telemetry and geo-referenced environmental data.
- Explored and modelled species distribution in relation to environmental variables using linear and nonlinear regression models.
- Designed and maintained relational (geo)databases.
- Provided insights to stake-holders, team members, and scientific audiences through public talks, data reporting and visualization.

**Research Technician**, Nov. 2010 - Nov. 2011
Department of Zoology and Evolutionary Genetics, University of Sassari (IT)
Main goal: Investigate spatial distribution, abundance and reproductive success of wolves in central Italy.

- Collected geo-referenced environmental data.
- Collected and analyzed bio-acoustic data.
- Collected and analyzed presence-absence data via camera-trap surveys.

# Education

**Master of Science (MSc)**, Jul. 2010
*Environmental Sciences and Natural Resources Management*, University of Sassari. Grade: 110/110 *cum Laude*
Environmental modelling, statistical inference, advanced statistical theory, zoocenosis and wildlife conservation, wildlife management, genetics, plant conservation, environmental economics, systems ecology, landscape ecology, regional geology, sedimentology.

**Bachelor of Science (BSc)**, Feb. 2008
*Environmental Sciences*, University of Perugia. Grade: 107/110
Principles of biology, geology and ecology. The course of study covered a wide range of subjects to provide the students with the solid background required to undertake ecological and environmental studies.

# Further training

**Data Science Bootcamp**, Aug. 2019 - Nov. 2019
*Business Trends Academy*
Data protection and ethical matters | Linear and nonlinear regression | A/B testing | Hypothesis testing | Data visualization in Tableau | Object oriented programming (OOP) | Python modules and functions | Pandas and NumPy | Multiprocessing and multithreading | RESTful API | Webscraping | Neural Networks and Machine Learning techniques | Keras, Anaconda and TensorFlow.

**Movement Ecology Summer School**, Aug. 2015
*Population Ecology Research Group, University of Zurich*
GIS and remote sensing in R | Characterization of movement trajectories | Home range analysis | Habitat selection modelling | Integration of data from alternative sensors and future perspectives.

**Next Generation Data Management in Movement Ecology**, Jul. 2015
*IRSAE, International Research School in Applied Ecology - FEM, Edmund Mach Foundation*
Spatial database management in PostgreSQL/PostGIS | Movement data analysis in R

**Multivariate Data Analysis for Ecology and Evolution in R**, Nov. 2012
*CIBIO - Research Center in Biodiversity and Genetic Resources*

Curriculum Vitae - Ivan Palmegiani

Explanatory methods (PCA, PcoA, MDS, clustering) | Inferential methods (Randomization, bootstrap, jackknife, Monte Carlo, GLM, PLS, CanCor, Mantel Test) | Evolutionary and ecological Non-Independence (PGLS, PIC, rates of change, spatial autocorrelation, spatial GLS) | Model selection (i.e. Hypothesis testing vs information criteria) | Analysis of dispersion (i.e. Convex hulls area/volume, nearest neighbor, centroid size, eccentricity).

**BiostAT 2011 – Statistic inference in Biology and Human Sciences**, Jun. 2011
*UniASTISS, Department of Statistics - Purdue University, Department of Economy - UniMORE, Italian Institute for Philosophical Studies, Department of Statistics - Bologna University, Department of Human and Animal Biology - University of Turin, Department of Social Research - University of Eastern Piedmont, Asti Association for Scientific and Technological Development*
Linear and nonlinear regression models | Non-parametric regression model | Principal components analysis | Factor analysis | Correspondence analysis | Cluster analysis | R coding.

# Hobbies and interests

Outdoor sports and activities such as climbing, bouldering, hiking, biking, canoeing, camping • Indoor gardening • Urban agriculture • DIY and Handicraft • Music and Arts • Cooking

**References available on request**