Education

Education

2013-2017: University of Oxford, DPhil (PhD) Plant Sciences

During my PhD I used machine learning, extensive computational modelling and advanced statistics to understand how plants save water under drought stress. I also studied the relationship between climatic variables and the distribution of species under existing climatic scenarios and under climate change scenarios. I used different approaches to test the differences between the "climatic niche" of water-saving and non-water-saving plants including Neural networks, XGBoost, Random Forest, and Clustering analysis. I also conducted A/B tests using bootstrapping and Bayesian statistics. These analyses were conducted using R and Python.

2012: MSc Biology (1st place), Universidad de los Andes (Colombia)

I used R to test different hypotheses concerning changes in the biochemistry of juvenile plants when they experienced drought.

2010: BSc Biology, Universidad de los Andes (Colombia)

I learned R in 2008 as part of my biostatistics course, used extensively in my dissertation and since then I have not stopped using it.

Awards

2013-2016: Weidenfeld Scholarship and Leadership Program for D.Phil. Funding at University of Oxford.

2013-2017: Scholarship from Administrative Department of Science, Technology and Innovation (Colombia) for D.Phil. Funding at University of Oxford .

2014: Winner of New Phytologist Poster Prize (1 st place), 34 th New Phytologist Symposium "Plant Systems Biology and Ecology of CAM plants", California, U.S.A.