

Julia Han Janicki
Nelson Institute

Throughout my career I have undertaken many projects and acquired many skills across multiple fields, but the one focus that has motivated me and tied together all my experiences is the conservation of our planet and the species that inhabit it. Many pressing environmental issues require immediate and efficient solutions, and I believe that using technology and data-driven methods are good ways to tackle problems such as illegal wildlife trade, illegal fishing and climate change. This is the main reason why I initially became interested in GIS and remote sensing, as I believe that it is a technology with great potential. This led me to the decision of taking part in the Environmental Observation and Informatics M.S. program, as I would like to broaden my skills and knowledge in order to be able to have a bigger impact.

Throughout this program, I have acquired skills and knowledge in spatial analysis, statistics, communication and more. Specifically related to remote sensing, I learned how to acquire, process and analyze different satellite images, as well as the various applications of remote sensing and how it could be applied to conservation as well as international development.

During my summer placement, I was able to take many of the skills I have learned throughout the program and use them in a practical setting on a project that has real-world impact. I had the opportunity to work with Pro Eco Azuero (PEA), a conservation non-profit based in Panama. PEA is an organization that does a lot of reforestation of tropical dry forests in the Azuero peninsula in Panama, which was once largely tropical dry forest but now has less than 7% forest cover, largely due to land clearing for cattle grazing. Though PEA does reforestation work in the Azuero peninsula, this region is frequently perceived as high risk for investment in reforestation given the frequent fires due to cultural reasons. Understanding the spatial and temporal patterns of burns in the region is essential for planning reforestation efforts. This was the motivation behind my main project for the summer which focused on burned area mapping.

I am really grateful for the scholarship provided to me by the IRIS, as it not only played a role in influencing my decision to enroll in the EOI program, which turned out to be a really great decision, but it also enabled me to do a meaningful final placement in a different country and in a real-world context.

Recently, I was selected for a consultancy position with UNDP doing data visualization, and I will be using some skills I have acquired during the program. I am really thankful for the opportunities that IRIS and the EOI program have brought to me.