Jesús González Ferrer

Biotechnology graduate and Computational Biologist

—

Contact information

jesusgzlezferrer@gmail.com

Linkedin

Github: JesusGF1

—

Languages

Spanish - Native
English – C1
German – A2

—

Skills

Python, R, Ruby
SQL, SPARQL, Git
Bash

Professionally, I would describe myself as a **Bioinformatician**. I studied my Bachelor's Degree in **Biotechnology** at the **Miguel Hernandez University of Elche** (UMH). The degree focused on Genetics and Biochemistry while also acquiring basic scientific and transversal knowledge. During this time, I started to notice a trend, our teachers were pointing to some unsolved problems and hinting about how computation could contribute to solve them. It was not until the third year that I was introduced to Computational Biology with the subjects of Bioinformatics and Molecular Modeling. These subjects although challenging, sparked in me the interest to pursue further education in this field and introduced me to **Python**. I continued my Computational formation with **Statistical Data Analysis and Modeling** where I was introduced to **R**.

After these experiences with programming, I decided that I wanted to learn more about the computational tools available to improve the quality of research in the Bio-related fields. This led me to enroll in the Master's Degree in **Computational Biology** held by the **Technical University of Madrid** (UPM). From the different subjects available I decided to focus on the ones that offered insights in data analysis, Machine Learning, Big data Engineering, Computational Genomics, and in silico Lead Discovery.

Regarding my working experience, I completed a summer internship in Drs. **Micol and Ponce Labs** (**UMH**) where I studied the genetic mechanisms of splicing in *Arabidopsis thaliana*. I also completed a yearly internship at Dr. **Victor Borrell lab** (**UMH**) where apart from my wet-lab work in the creation of genetic constructs and the use of molecular biology techniques I started using R for the statistical analysis of immunohistochemistry images from the Neocortex. This year, I am completing a Master internship in **data science applied to neurodegenerative diseases** at **Computer Sciences School** of the **Complutense University of Madrid (UCM)** under Dr. **Jose Luis Ayala Rodrigo** supervision. The first part of this internship consists of mining knowledge from information obtained through brain scans of Multiple Sclerosis patients using unsupervised machine learning techniques. The second part involves the design, training and evaluation of machine learning algorithms for diagnosis of cognitive impairment in this group.

My future aspirations are to apply **data science and Omics technologies to medicine** and/or research in **neuroscience**. For this same reason, I am very interested in working for biotech or pharmaceutical companies that want to solve problems such as neurodegenerative diseases, cancer, and other aging-related diseases. However, I do not exclude the possibility of doing a PhD, either in an enterprise (Industrial PhD) or an academic institution involved in brain and genomics projects.