

Fernando Pozo Ocampo

COO at SpikaTech | PhD in Bioinformatics and Machine Learning

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- LinkedIn: linkedin.com/in/fernandpozo
- GitHub: github.com/fpozoc (Note: Private repositories available upon request)
- Google Scholar (~5 000 citations): scholar.google.com/citations?user=3YLw4POAAAAJ&hl

Skills

- TD of an oriented AI product, overseeing its full development lifecycle.
- Lead cross-functional teams across AI and engineering with focus on certified software delivery.
- Active contributor to AI-assisted decision systems in complex environments.
- Defined technical roadmaps, managed operations, budgets, and partnerships in startup settings.
- Applied ML to real-world engineering problems with measurable results.
- Delivered research-to-product pipelines, integrating publication, validation, and regulatory compliance.
- Experienced in securing and coordinating competitive EU and national funding.
- Strong communicator and lecturer in AI, machine learning and data science.
- Built and deployed ML systems using Python, PyTorch, Hugging Face, LangChain, Docker, MLflow. Focused on robustness, reproducibility and impact in ML system design.
- I am fluent in Spanish and English.

Professional Experience

Mar 2022 - Present

Chief Operating Officer, SpikaTech SL, Madrid, Spain

Key Responsibilities:

- Leading 5 EU projects related to HealthTech (EIC Accelerator) and DefenseTech (EDF), dealing with top corporates, managing substantial budgets, and acting as main coordinator for one of them.
- Leading AI and Machine Learning initiatives within the company, including new proposals for integrating Generative AI and Machine Learning into our technology solutions.
- Implementing ISO-13485 for quality management, IEC 62304 for software lifecycle processes and ISO-27001 for managing information security.
- Managing budget allocations, financial planning, and ensuring sustainable growth, overseeing product development and innovation, and managing and developing our team to attract and retain top talent.
- Building key partnerships, connecting with investors, and maintaining trust in our vision and offerings.
- Driving business development across the EU, Shanghai, West Coast US, Dubai, Riyadh, Singapore and Melbourne.

- Collaborating closely with our CEO to set company direction and ensure optimal operational execution.

Aug 2024 - Present

NATO SCI-ET-065, AI and Autonomous System, Team member, NATO STO

Participating as a Technical Team member in the SCI-ET-065 team on Barriers, Challenges, and Quantification of Trust in Complex Autonomous Systems, with a focus on potential AI Acceleration.

Oct 2022 - Mar 2022

Senior Machine Learning Engineer, SpikaTech SL, Madrid, Spain

Key responsibilities:

- Developing and fine-tuning Machine Learning models.
- Working closely with different teams (IT, Data Science, Mathematical Modelling) to apply AI concepts.
- Managing data engineering efforts to ensure quality and accessibility of data.
- Leading and mentoring colleagues in the technical aspects of our work.
- Building systems and pipelines for our models and implementations.
- Regularly checked that our models were effective and reliable in real situations.

Technical research: Time Series Analysis, Signal Processing, Cloud Computing (Azure), Data Engineering, MLOps, Deep Learning, Python, Machine Learning.

Feb 2018 - Oct 2022

Bioinformatics and Machine Learning Engineer, CNIO, Madrid, Spain

I specialized in a range of technical research areas, including Bioinformatics, Machine Learning, NLP, Data Science, and Statistics. My expertise allowed me to contribute to a variety of research fields, including Genome annotation, Genomics, Immunotherapy, and Chest-X-Ray analysis.

I have a deep passion for research and a strong record of academic success, as demonstrated by my [Google Scholar](#) profile. Furthermore, my dedication to open-source software development is reflected in my [Github repository](#), where I share the majority of my projects and codebase.

Jul 2017 - Feb 2018

Data Analyst, Kantar Health, Madrid, Spain

My role involved providing valuable support in market research projects with a focus on the development, analysis, and optimization of digital strategies created by the pharmaceutical industry across Europe. In addition, I was responsible for managing the Backend/Frontend of a Big Pharma web platform service using PHP, SQL, HTML5/CSS/JS, and Bash scripting to ensure server maintenance. Furthermore, I am actively involved in developing a new mobile application for a pharmaceutical company. The primary objective of this app is to streamline clinical surveys and ensure accurate data collection through the use of PhoneGap Technology. To achieve this, I use my proficiency in PHP, SQL, HTML5/CSS/JS to develop and implement the necessary functionalities.

Education

Sep 2018 - Apr 2022

PhD, Bioinformatics and AI, Universidad Autónoma de Madrid, Madrid, Spain

Classification and interpretation of the biological importance of isoforms produced by alternative splicing using machine learning for the improvement of genome annotation and its clinical interpretation.

Sep 2016 - Jul 2018

Master of Science, Bioinformatics for Health Sciences, Universidad Pompeu

Fabra, Barcelona, Spain

Composed by theoretical lessons in Bioinformatics, which is an interdisciplinary field which combines mathematical and computer sciences with biology and/or medicine, and a complete research Master Thesis in an External Center.

Sep 2012 - Jul 2016

Bachelor of Science, Biomedical Sciences, Universidad de Alcalá, Madrid, Spain

Strong foundations in biology, mathematics, chemistry, statistics, quantitative methods, genetics, cellular and structural biology, epidemiology and human health.

University Teaching

Jul 2022 - Jul 2023

Subject Coordinator, Universidad Francisco de Vitoria, Madrid, Spain

As the Subject Coordinator and Advanced Bioinformatics Lecturer at UFV from 2022, I took on a more comprehensive role in shaping the curriculum and guiding students through the course. In addition to teaching the course material, I was responsible for overseeing the development and delivery of the subject, including designing assessments and managing teaching resources.

Jul 2022 - Present

Bioinformatics Professor, Universidad Francisco de Vitoria, Madrid, Spain

I taught a fourth-year course titled "Advanced Bioinformatics," which equips students with the necessary knowledge and skills to tackle complex challenges in the field.

Sep 2021 - Jul 2022

Machine Learning Professor, University Carlos III de Madrid, Madrid, Spain

I had the privilege of teaching an entire subject dedicated to this important area of study. Specifically, I taught the "Machine Learning in Healthcare" course, which is a key component of the B.Sc. in Data Science and Engineering program.

Throughout this course, I shared my knowledge and expertise on a range of topics related to machine learning in healthcare, including data preprocessing, feature extraction, model selection, and performance evaluation. In addition to traditional classroom lectures, I used a variety of teaching methods such as hands-on exercises, case studies, and guest lectures from industry experts to provide a well-rounded learning experience for my students.

By the end of the course, my students gained a deep understanding of the application of machine learning in healthcare and are equipped with the tools and knowledge necessary to apply these techniques in real-world scenarios. I am proud to be a part of the education of the next generation of data scientists and healthcare professionals, and to contribute to the advancement of this important field.

Consulting

Feb 2020- Sep 2020

IT Consultant, Atrys

As a part-time I worked closely with a team of partners of Atrys to manage servers, designing personalized bioinformatics pipelines, and provide advisory services in the field of bioinformatics. Leveraging my expertise in the latest tools and technologies, I helped them achieve their goals by designing and implementing innovative solutions that improved performance, efficiency, and scalability.

Jan 2016 - Jul 2016

Contractor, CNB, Madrid, Spain

As part of a short-term project focused on deep learning, I collaborated closely with a team of partners to annotate and validate clinical text data, gaining valuable insights into natural language processing (NLP) best practices.

Feb 2020- Sep 2020

IT Consultant, START Barcelona, Remote

As a part-time IT Consultant I was helping with my passion for technology on a large-scale web project and conducting research into cutting-edge AI technologies.

Internships

Sep 2017 - Feb 2018

Bioinformatics and Machine Learning Internship, CNIO, Madrid, Spain.

I was involved in cutting-edge research in the fields of Bioinformatics and Machine Learning and working on a main project which involves the development and implementation of a machine learning algorithm to predict the functional importance of potential Alternative Splicing.

Jan 2016 - Jul 2016

Bioinformatics and Data Science Internship, CNB, Madrid, Spain

As an intern at CNB, I was involved in cutting-edge research areas such as genomics and epidemiology. Within genomics, I was responsible for tasks such as sequence alignment, gene finding, genome assembly, and genome annotation. In epidemiology, I focused on applying mathematical and computational models to better understand infectious diseases.

The main project that I was working on was "Bioinformatics analysis of data from whole genome sequencing". This project involves applying my knowledge and skills in bioinformatics and data science to analyze large datasets generated from whole genome sequencing. Through this project, I was gaining valuable experience in data analysis, interpretation, and presentation, as well as developing proficiency in tools and techniques such as Python, R, and statistical analysis methods. Overall, this internship provided me with a unique opportunity to apply my skills in a real-world research setting and contribute to ongoing scientific discoveries.

Certifications

Jun 2020 - Jul 2020

Deep Learning Professional Certificate, IBM

Nov 2019 - Feb 2020

Software Instructor, The Carpentries

Volunteering

Sep 2018 - Jun 2022

Technical Leader, CNIO Student Association

Projects

Aug 2017 - Present

TRIFID - Machine Learning Tool to Reliable Identification of Functional Isoform Data

Project source: gitlab.com/bu_cnio/trifid

Jan 2022 - Jul 2022

A system for the identification and interpretation of pulmonary pathologies from Chest X-rays images using Deep Learning

Project source: github.com/Rules99/Chest-X-Ray-with-Radiologist-AI

Jan 2022 - May 2022

An extremely user-friendly Chest X-Ray image classifier using PyTorch Lightning, Hydra and a custom logger with ML best practices

Project source: github.com/fpozoc/cxr-img-classifier

Honors & Awards

Nov 2018

1st prize in Big Data & Cancer Genomics Challenge, ONCOTHON

Project awarded: Integrated workflow to improve personalized treatments exploiting Cancer vulnerabilities.

Nov 2018

International Excellence Fellowship. CEI BioTic. University of Granada

References

- Michael Tress, PhD, Group Leader at CNIO - mtress@cnio.es
- Santiago García Martín, MD, CEO at Azure Biosciences - contact@azurebiosciences.com
- Marcos Cámara-Donoso, Generative AI Lead at Astellas Pharma - marcos@lifebit.ai
- Isaac Filella Mercè, PhD, Postdoctoral Researcher at BSC - isaac.filella1@bsc.es
- Gabriel Piedrafita Fernández, PhD, Professor at UCM - gpiedraf@ucm.es