

PIERO PALACIOS BERNUY

Bioinformatician & Data Scientist

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Hi! My name is Piero, and I'm a Biologist (with main formation in biotechnology) from Peru. I have specializations in data analysis and bioinformatics from Harvard University and MIT. Also, I love writing reproducible interactive reports using Quarto as a hobby.

PROGRAMMING SKILLS

R – Python - R Markdown / Quarto - Git / Github – Bioconductor - High Performance Computing (HPC) – Linux - Deep Learning (Pytorch) - Machine Learning (scikit-learn)

Here is a showcase of my skills:

<https://pipaber.github.io/Portfolio/>

LANGUAGES

- Spanish: Native
- English: B2 (IELTS)

PROFESSIONAL EXPERIENCE

Data Scientist and Statistical Specialist

International Potato Center

Aug 2024 – Actual

Lima, Peru

- Contribute strategically to the planning and execution of data management initiatives within the organization, providing specialized expertise and insights.
- Oversee and manage the day-to-day operations related to data management, demonstrating proficiency in implementing and maintaining protocols.
- Support Open Access (OA) and Open Data (OD) initiatives to increase the visibility, accessibility, and impact of CIP's research products, aligning with organizational policies and guidelines.
- Collaborate with stakeholders to identify opportunities for enhancing data management systems, Apps, databases, and tools, providing input based on specialized knowledge.
- Spearhead the implementation of "Ask the Data" functionality in CIP's data repositories, utilizing LangChain and integrating OpenAI for natural language processing.
- Contribute to the development of applications and dashboards to support the integration of AI technologies, leveraging expertise in data science and analysis.

Consultancy for Statistical Support - Seed System / Agrobiodiversity / Timeline datasets

International Potato Center

Oct 2023 – Dec 2023

Remote

- Conduct statistical analysis as agreed with the team.
- Generate graphs, tables, and visuals to best represent results.
- Contribute to science article development.

Bioinformatics Scientist

Rayca Precision

Jan 2023 – Oct 2023

Remote

- Provide statistical computational tools for biologically based activities like genetic analysis, measurement of gene expression, and also gene sets analysis.
- Analyze large molecular datasets like Next Generation Sequencing (NGS) data, microarray data, genomic sequence data, and also proteomics data for clinical or basic research purposes.
- Develop new software applications or customize existing applications to meet specific project needs.

Bioinformatician Intern

Rayca Precision

Aug 2022 – Dec 2022

Remote

- Deploy and testing of NGS data processing pipelines.
- Analyze large amounts of information to discover trends and pattern.

Consultant

International Potato Center

Mar 2019 – Oct 2019

Lima, Peru

- Research, development, and improvement of an in vitro medium for the propagation of sweet potato compared with media used by the International Potato Center.
- Experience in the area SO Conserving Biodiversity for the Future and procedures ISO17025.
- Proposal of a new medium of cultivation to generate a better growth of the plants of sweet potato.

Professional Practitioner

International Potato Center

Mar 2018 – Mar 2019

Lima, Peru

- Management and recovery of the collection in vitro “Low viability of sweet potato”.
- Responsible for training in botanical and physiological knowledge in order to strengthen the methodology of in vitro propagation.

- Establishment of working methodologies and flowcharts for the management of the collection in vitro “Low viability of sweet potato”.

EDUCATION

B. Sc. Biology / Biotechnology

La Molina National Agrarian University

Lima, Peru

- Thesis: [Functional analysis of transcriptomes of *Coffea arabica* L. related to thermal stress.](#)
- Development of bioinformatics pipelines in HPC (High performance computing) for functional analysis of coffee transcriptome.

POST GRADUATE SPECIALIZATIONS

Data Analysis: Statistical Modeling and Computation in Applications

MITx (Massachusetts Institute of Technology)

- [Certificate](#)

Machine Learning with Python-From Linear Models to Deep Learning

MITx (Massachusetts Institute of Technology)

- [Certificate](#)

Fundamentals of Statistics

MITx (Massachusetts Institute of Technology)

- [Certificate](#)

Probability - The Science of Uncertainty and Data

MITx (Massachusetts Institute of Technology)

- [Certificate](#)

Introduction to Computer Science and Programming Using Python

MITx (Massachusetts Institute of Technology)

- [Certificate](#)

Data Analysis for Genomics

HARVARDx

- [Certificate](#)

Advanced Bioconductor

HARVARDx

- [Certificate](#)

Case Studies in Functional Genomics

HARVARDx

- [Certificate](#)

Introduction to Bioconductor

HARVARDx

- [Certificate](#)

High-dimensional Data Analysis

HARVARDx

- [Certificate](#)

Statistical Inference and Modeling for High Performance Experiments

HARVARDx

- [Certificate](#)

Statistical Analysis in Bioinformatics

USMx (University System of Maryland)}

- [Certificate](#)