Pierre Mallinjoud

Bioinformatics Engineer

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Contact: +33 6 61 54 88 77 <u>pierre.mallinjoud@gmail.com</u> **Location:** 25 rue des trois pierres - 69007 - LYON - France

Portfolio: https://pmall.github.io/en

- Bioinformatics engineer and technical expert with 12 years of experience in the development of bioinformatics tools, database design and management, large-scale statistical analysis, genomic and molecular data processing, and rich web interfaces.
- · Comfortable in dynamic, multidisciplinary environments
- Co-author of two peer-reviewed scientific publications

Work Experience

Bioinformatics Engineer

ENYO Pharma · Lyon · October 2014 - February 2024

Clinical-stage biopharmaceutical company with an innovative drug discovery approach

- Designed and managed VinlandDB, a database of human and viral protein-protein interactions
- Developed web interfaces for both public exploration of VinlandDB and private curation of publications related to protein-protein interactions
- Created internal tools to manage laboratory biological materials and analyze experimental results produced within the company
- Developed custom software and performed statistical analyses to support ENYO Pharma's drug discovery platform
- Carried out large-scale data analyses to characterize the mode of action of therapeutic compounds (RNA-seq, microarrays, proteomics, functional annotations, molecular databases)
- Participated in the MIMESIS project, co-funded by the European Union (screening of 10,000 compounds from the drug discovery platform)
- Took part in the CARE consortium (Corona Accelerated R&D in Europe)
- · Collaborated with the Swiss Institute of Bioinformatics on research projects
- Participated in the recruitment and supervision of bioinformatics interns, including projects on protein motif analysis and molecular machine learning

Inserm U851/U1111 · Lyon · October 2013 - October 2014

Cellular Biology of Viral Infection Team

· Contributed to early development of VinlandDB

Personal Projects

2024

- · Developed and deployed Solidity contracts on the Ethereum blockchain
- Built web3 interfaces to interact with these smart contracts

Internships & Fixed-term Positions

Cancer Research Center of Lyon

Alternative Splicing and Tumor Progression Team

- Developed a microarray analysis platform for exon-level DNA chips
 M2 Internship (Feb. Jun. 2011), then Fixed-term Contract (Jul. Nov. 2012)
- Developed a database annotating alternative splicing events in the human genome M1 Internship (Mar. – Jun. 2010), then Short-term Contract (Jul. – Aug. 2010) https://fasterdb.ens-lyon.fr/

Publications

Meyniel-Schicklin L, Amaudrut J, Mallinjoud P, et al. Viruses traverse the human proteome through peptide interfaces that can be biomimetically leveraged for drug discovery.

Proc Natl Acad Sci U S A. 2024;121(5):e2308776121. doi:10.1073/pnas.2308776121

Mallinjoud P, Villemin JP, Mortada H, et al. **Endothelial, epithelial, and fibroblast cells exhibit specific splicing programs independently of their tissue of origin.**

Genome Res. 2014;24(3):511-521. doi:10.1101/gr.162933.113

Technical Skills

Programming languages:

TypeScript, PHP, Perl, Python, R, SQL, Solidity

• Frameworks/Libraries:

React, Next.js, Tailwind CSS, PyTorch, Langchain

Data Infrastructure:

PostgreSQL, Docker, Linux server administration, big data handling

· Blockchain:

Advanced knowledge of Ethereum and Solidity

Productivity & AI:

Word, Excel, PowerPoint, AI tools

Languages:

Fluent English, scientific vocabulary

Education

2011 • Master's Degree in Health and Population – Bioinformatics, Biostatistics, Genomics Université Claude Bernard Lyon 1 - Lyon (69)

2009 • Bachelor's Degree in Computer Science

Université de Savoie - Chambéry (73)