Sébastien Gradit

Data Scientist
Bioinformatician

✉ Issy-les-Moulineaux, France

📞 +33 6 50 84 94 62

@ sebastiengradit@gmail.com

Social Network ——

in S. Gradit   ○ sebgra

About Me ——

PhD-trained bioinformatician from the Pasteur Institute seeking to apply expertise in data science and biological interpretation to advance research. Proven ability to leverage machine learning and statistical modeling to solve complex biological problems.

Languages ——

- English: Fluent (TOEIC 955/990)
- French: Mother tongue

Hard Skills ——

- Basic programmation: Bash, Python, R, C++, HPC (Slurm, AWS)
- Bioinformatics: Multiomics integrative analysis, Automation of mapping and genomics analysis
- Data analysis: Data mining, interactive dashboards (Shiny, Streamlit), SQL databases
- Machine learning: TensorFlow, Keras, Scikit-learn
- Workflow: CI/CD automation (git, Snakemake, Nextflow)
- Containerization and deployment (Docker, Singularity)
- Web: Static (HTML, CSS)

Soft Skills ——

- Adaptability
- Communication
- Problem solving
- Scientific inquiry

Working Experience

2021-2024	**PhD candidate**	Pasteur Institute, Paris

Development of statistical modeling to address missing data in genomics, with focus on genome contacts.

02/2020 – 08/2020	**Biomedical Engineer**	Siemens Healthcare - LIPADE, Paris

Applied machine learning techniques to xSPECT imaging for automated segmentation of bone lesions, enhancing the objectivity and precision of cancer treatment monitoring compared to traditional SPECT imaging.

02/2019 – 09/2019	**Biomedical Engineer**	Danone Research, Saclay

Benchmark of bioequivalence assays, development of interactive interface for clinical trial statistical plans visualization, and machine learning methods implementation for clinical trial plan refactoring for data-driven decision-making.

05/2018 – 08/2018	**Biomedical Engineer**	Caboma, Montréal

Design and optimization of biomechanics models within proprietary software, tailoring foot orthotics designs to individual patient morphology for improved treatment outcomes.

Education

2021 – 2024	**PhD in bioinformatics**	Pasteur Institute - Sorbonne University

Regulation Spatiale des Genomes lab.

2019 – 2020	**M.Sc. in Image Processing**	Télécom Paris - Sorbonne University

Advanced medical images processing and A.I. | *Honors*

2016 – 2019	**Master's Degree in Engineering (Dipl. Ing.)**	ISBS - ESIEE Paris

Bioinformatics, Medical Imagine and A.I. | *Highest Honors*

Publications

Pending	**Hicberg: Reconstruction of genomic signals from repeated elements - BiorXiv**

Gradit S., Ortion S., Larrous P., Koszul R., Cournac A.

Selected Scientific Communication

2024	**JOBIM 2024**	Toulouse, France

Poster | Prediction of omics signals from repeated elements.

2024	**JeBiF@JOBIM 2024**	Toulouse, France

Workshop | Good practices in bioinformatics.

2024	**ICTE**	St-Malo, France

Poster | Prediction of omics signals from repeated elements.

2023	**31th Intelligent Systems For Molecular Biology**	Lyon, France

Poster and Talk | Statistical inference of repeated sequence contacts in Hi-C maps.

Certifications

2023	**DeepLearning.AI**

TensorFlow Advanced Techniques Specialization and Deep Learning Specialization

2023	**DeepLearning.AI - Stanford**

Machine Learning Specialization

Awards

2022	**1st Prize of D4GEN Hackathon**	Genopole - Evry

Predicting contacts between nuclear parasites and host genome