

R&D Specialist in Instrumentation, Waves and Imaging
Looking to tackle complex R&D geophysics and data analysis problems
to make all the difference in natural hazards and environmental monitoring.

Experience

2024/05 – now	Geophysical and Instrumentation Network Manager, CEA/DASE, La Paz, Bolivia International volunteer coordinator of the cooperation program in seismology and infrasound. Operational maintenance of monitoring network as part of the local team, sharing data with the CTBTO. Configured seismic data processing and real-time system software (SeisComP). Scientific writing and data analysis involving machine learning for temporary low-cost seismic network (Python). Reference: Laurent Bollinger, PhD
2023/02 – 2024/04	Research Geophysicist, Sercel, Paris, France Developed a workflow for passive joint inversion of surface and body waves in railway environment. Processed passive 3D surface wave tomography for civil, mining and energy infrastructures. Led international interactions with the University College of Dublin. Publication in European Association of Geoscientists and Engineers' journal Near Surface Geophysics. Reference: Thomas Bardainne, PhD and Thibaut Allemand, PhD
2022/05 – 2022/08	Visiting Student, Géoazur CNRS/IRD, Nice, France Developed earthquake data analysis for ocean-bottom Distributed Acoustic Sensing (Python). Confronted data to models of microseismic noise generated by ocean swell with IFREMER. Reference: Professor Diane Rivet
2021/07 – 2021/12	Ultrasound Engineer, Iconeus, Paris, France Validated medical devices for functional ultrasound imaging. Developed an image processing UI application based on contrast-to-noise ratio. Prototyped a multiphysical test bench for transducers (Arduino). Reference: Bruno Osmanski, PhD
2020/07 – 2020/08	Summer Intern, Institut Langevin, Paris, France Implemented a simulation of wave-dressed droplet in heterogenous random media (MATLAB). Identified transport regimes including localization with spatial correlation of scatterers. Reference: Professor Emmanuel Fort

Education

2022/09 – 2023/07	M.Sc. in Geosciences, École Normale Supérieure - PSL, Paris, France Hydrogeology, Cryology, Geophysical Imaging, Mining Geology, Machine Learning, Environmental History Advisor: Professor Florence Habets
2019/09 – 2022/07	Engineering Graduate School in Physics, ESPCI - PSL, Paris, France Underwater Acoustics, Medical Imaging, Telecommunications, Statistical Modeling, Quantum Optics Advisor: Professor Emmanuel Fort
2017/09 – 2019/07	Intensive program in STEM, Lycée Jean Perrin, Lyon, France Mathematics, Physics, Chemistry, Engineering, Litterature, English

Skill matrix

Skill	Level	Comment
Languages:	French, English, Spanish	■■■■■ Proficiency
	German, Russian	■■■■ Basic
Programming:	Python/MATLAB	■■■■■ Deepened expertise with hundreds of projects
	shell scripting	■■■■■ Intermediate knowledge with some project experience
	C/C++	■■■■ Little project experience
	MySQL	■■■■ Basic knowledge
OS:	Arduino/Raspberry Pi	■■■■■ Ready for quick prototyping!
	Linux	■■■■■ I have been using Ubuntu and CentOS for years
Softwares:	SeisComP	■■■■■ Extensive experience in operational environment
	Generic Mapping Tool	■■■■■ Creating neat base maps
	git	■■■■■ Pull and merge in software developer's branch