



THIBAUT FANEY

 [thibaultfaney.github.io](https://github.com/thibaultfaney)

 in/thibaultfaney/

 [publications](#)

ABOUT ME

I am a researcher at the crossroads of artificial intelligence and numerical simulation. I am detail-oriented and thrive on developing cutting-edge algorithms and software to solve real-world problems in practical applications.

EDUCATION

PhD in Nuclear Engineering

UC Berkeley | 2010-2013

Thesis title: Numerical simulations of Tungsten under helium irradiation

MSc in Nuclear Engineering

UC Berkeley | 2008-2009

BSc and MSc in Engineering

Ecole des Mines de Paris | 2005-2008

LANGUAGES

- French, English: bilingual
- Spanish, German: intermediate

HOBBIES

- Competitive Tennis, skiing and snowboarding, hiking
- Acting

EXPERIENCE

Research Scientist | Feb 2014 - Present

[IFP Energies Nouvelles](#), France

Project Leader for ACAI (Acceleration of Computations through Artificial Intelligence)

- Managed a team of 4 research scientists and supervised 6 PhD students and 3 Post-docs
- Developed state-of-the-art algorithms for several research projects related to the energy sector (CO₂ Storage, wind farm optimization, catalyst development for biofuels and batteries) with implementations in several HPC industrial codes
- Pioneered and developed AI-related research at IFPEN: roadmap development, project proposal review, scientific animation
- Contributed to the AI research community (organization of several conferences and workshops, Dataia program committee member)

Co-Founder and CTO | Apr 2019 - Present

[Casablanca](#), Los Angeles

Automated data processing, generation and analysis for visualization of 3D GIS data

- Led the development of Python codebase for real-time GIS data processing
- Implemented GIS data storage and management using PostGIS/PostgreSQL
- Spearheaded research of state-of-the-art neural rendering methods for photorealistic 3D real estate visualization leveraging neural radiance fields (NeRF)

TEACHING

- Machine Learning | 2019 - 2024, IFP School
- Introduction to Data Science | 2022 – 2025, Ecole des Mines de Paris

SKILL HIGHLIGHTS

- Outstanding verbal and written communication skills demonstrated through 10+ publications in peer-reviewed journals, conference presentations, and experience teaching university classes
- Excellent scientific project management skills to coordinate a team of mathematicians, computational scientists and domain experts
- Technical skills
 - Programming languages: Python, C++, Fortran, Matlab
 - AI Frameworks: Pytorch, Tensorflow, Jax
 - Neural Rendering: Nerfstudio, Colmap, instant NGP
 - Database systems: SQL, Postgre/PostGIS, Amazon RDS
 - GIS specialist: GDAL, Fiona, rasterio, shapely, geopandas