Martin ACCOU

18 Rue de Saint-Omer 62570, Wizernes +33 7 51 63 51 88 martin.accou@icloud.com French - 24 years old



AI/ML Engineer

Work experience

2024 - Present **ML engineer**, *D3S*, Grenoble, France.

- Developed a 3D mesh classifier for automatic labeling of Computer-Aided Designs (CAD), leveraging a customized transformer-based architecture.
- Developed a 3D instance segmentation model tailored for CAD designs.
- Developed a software tool to facilitate the labeling of CAD designs triplets for training an unsupervised classification model using triplet loss.
- Optimized the Open Cascade linker of our 3D analytics library, written in C.

2023, 6 months **Research data scientist**, *Reuniwatt*, Saint-Pierre, France.

- Post-processed day-ahead irradiance forecasts and benchmarked various time series models, including Kalman filter, GBM, RF, SVR, MLP, N-BEATS, and LSTM.
- Gained exposure to production challenges and Machine Learning Operations (MLOps).
- Worked in an agile team, contributing to sprint planning and iterative development.

2022, 6 months **Digital simulation engineer**, *DGA Technique aéronautiques*, Balma, France.

- Studied parachute behavior during cargo dropping using FEM and CFD.
- Gained experience in digital simulation using LS-DYNA.

Education

2020-2024 Master of Science, ISAE-SUPAERO (top 5 eng. school), Toulouse, France.

- \circ 1st and 2nd year: general engineering courses in computer science, applied mathematics, thermodynamics, physics and mechanics.
- \circ 3^{rd} year: major in data science and data engineering, minor in complex systems modeling and simulation: advanced statistics, HPC (OpenMP, MPI, CUDA).
- 2022 **Erasmus+ Semester**, *Politecnico di Milano (top 3 eng. school)*, Milan, Italy.
 - Relevant coursework: software development (Vue.js, Nuxt.js), reinforcement learning, space physics, aeroacoustics and multibody system dynamics.
- 2018-2020 **Preparatory classes**, Lycée Sainte-Geneviève (top 3 school), Versailles, France.
 - MPSI/MP: two-year undergraduate intensive course in mathematics and physics.

Skills

Programming Python, Go, C, Rust, Svelte.

Data tools PyTorch, TensorFlow, Sklearn, W&B, SQL, Spark, Dask, Docker, Kubernetes.

Languages French (native), English (C1, TOEFL iBT: 102/120), Spanish (B1), Italian (A2).

Interests

Hobbies Drums, travelling, open-source, linux, cybersecurity.

Sports Trail-running (ultramarathon), cycling, soccer (10 years, played in an academy).

Associative Designer of the RAID trails and race director for 2 years. The RAID ISAE is a multi-sport event featuring mountain biking, trail running, and canoeing, with over 500 competitors...