Grenoble, France.

Abderrahmane Ait gueni ssaid

SUMMARY

ML Engineer holding a Master's in Data Science and AI from Université Grenoble Alpes. Experienced in cutting-edge AI topics such as knowledge editing in LLMs, applying ML to medical imaging and scalable time-series forecasting. Proficient in multiple programming languages and AI frameworks.

SKILLS

Languages	**Programming**	**Packages**		**Tools**
English: C2 - EF SET	Python	Pytorch	Matplotlib	Linux
French: C1	C/C++	NumPy	Seaborn	Shell
German: A1	Cuda	scikit-learn	OpenCV	Docker
Arabic: Native	Java	SciPy	FastAPI	UV
Kabyle: Native	SQL,	Pandas	MLflow	Anaconda
	MPI	Transformers	Ray	Git
	OpenMP	LangChain	pytest	LaTeX

PUBLICATIONS

- H. A. Khodja, A. Ait gueni ssaid, F. Béchet, Q. Brabant, A. Nasr and G. Lecorvé, **"Factual Knowledge Assessment For Language Models Using Distractors"**, COLING 2025, ACL.

INTERNSHIPS

Engineer — **Orange - Lannion** — **Mar. – Aug. 2024**

- **Subject:** Evaluation of knowledge editing in large language models (LLMs).
- Contributed to the definition of a **Knowledge Measure (KM)**, to evaluate **atomic knowledge editing** of LLMs. Incorporated temporality. Conducted validation experiments on various LLMs and a random LM.

Engineer — **Grenoble Informatics Laboratory** — **May – July 2023**

- **Subject:** Integrating information retrieval (IR) constraints in deep neural networks.
- Reformulated **IR constraints** to the neural framework by developing the **mathematical foundations**.

Engineer — **Grenoble Institute of Neurosciences** — **Feb. – Aug. 2022**

- **Subject:** Integration of multi-parametric data by ML for the development of an imaging bio-marker in epilepsy.
- Implemented a clustering model using **k-means** and **Gaussian mixture models** for multi-parametric data, and evaluated employing AIC and BIC criterion's. Used mainly **Python**, **scikit-learn** and NiBabel.

Engineer — **Grenoble Informatics Laboratory** — **June – July 2021**

- **Subject:** Data augmentation with GANs for semi-supervised classification applied to images.
- Implemented a **semi-supervised model** in python for the prediction of phase and Euler angles in microscopic data. Evaluated different models and techniques including **GANs**, **SVMs** and **Random forest**.

EDUCATION

M.S. in Data science and AI — **Grenoble INP-Ensimag** — **Aug. 2024**

- 2nd year GPA: 14/20 (High Honors).
- 1st year GPA: 13/20 (Top 30% of the class) .

Magistère in Computer science — **Université Grenoble Alpes** — **Aug. 2024**

- University diploma of research in computer science 3 years GPA: 14/20 (High Honors).

B.S. in Computer science — **Université Grenoble Alpes** — **Aug. 2021**

CERTIFICATIONS

- Mathematics for Machine Learning: Linear Algebra, (2023), Imperial College London, Coursera.

PROJECTS

2025

- **Retail Forecasting Microservice:** Architected and containerized a per-store time-series pipeline using Prophet for modeling, Ray for parallel training, MLflow Registry for model versioning & monitoring, FastAPI for low-latency inference, and Docker/Kubernetes for scalable deployment.
- **LangChain Chat with Your Data**, deeplearning.ai.
- **Made With ML**: Combine machine learning with software engineering to design, develop, deploy and iterate on production ML applications.

2024

- **HomeLab**: A home server running multiple VMs and docker containers nodes on a Proxmox hypervisor.
- **Finetuning Large Language Models**, deeplearning.ai.
- **Pretraining LLMs**, deeplearning.ai.
- **Let's reproduce GPT-2 (124M)**, Andrej Karpathy Tutorial.
- **GPU-Accelerated Multilayer Perceptron from scratch** for MNIST Digits Classification.

2023

- **ML Algorithms from scratch**, Perceptron, Gradient descent, K-means, MLP.
- **Let's build GPT: from scratch, in code, spelled out**, Andrej Karpathy Tutorial.
- **SAT Solver**, Automated Planning and Problem Solving using PDDL4J and Sat4J.
- **Distributed Messaging System using Virtual Overlay Ring Network**, Designed and implemented using Java and RabbitMQ, highlighting expertise in distributed systems and routing algorithms.
- **System Programming - NachOS**. Collaborated in a team to implement processes, threads and synchronization features in the NachOS, gaining experience in OS design, implementation and multithreading.

2022

- **Balloon Breaker:** Developed a ROS-based C++ pipeline, coding the core contour-based balloon detection algorithm and integrating real-time tracking and control nodes; validated across multi-color scenarios.
- **Internships web scraping** Developed an automated application to extract and organize internship proposals from the faculty website into a CSV format. Python, Pandas, BeautifulSoup.

WORK EXPERIENCE

Student Tutor — **Self-employed - Grenoble** — **Sept. 2019 – Present**

- Taught maths, physics, chemistry and computer science, to all ages ranging from children to elderly.
- **Skills:** teaching, communication, patience, problem-solving, adaptability, time management.

Education Assistant — **Grenoble High School** — **Sept. 2021 – Aug. 2023**

- Facilitated student growth through comprehensive residential support and dedicated supervision.
- **Skills:** leadership, responsibility, communication, mediation, teamwork.

Student Tutor — **SOLUTION BILINGUE** — **Dec. 2018 – June. 2019**

- Taught maths, physics and chemistry, to pupils ranging from elementary to high school.
- **Skills:** teaching, communication, patience, problem-solving, adaptability, time management.

VOLUNTEERING

- **Technical Support.** Provided technical support by maintaining and troubleshooting surveillance cameras, video projection, and sound systems, along with other technical tasks.
- **Bread collection.** Coordinated the collection of surplus bakery bread for distribution to those in need through a charity.
- **Local cleaning.** Contributed to the maintenance and cleanliness of a local community association.