Yassine Machta

Last built on September 5, 2024.
Underlined text indicates clickable links
For latest version click *here*

 GitHub   LinkedIn   machtayassine@gmail.com   Personal page

🎓 Education

ENSAE Paris	2021-2025
Engineering Curriculum: Data Science, Statistics and Learning. GPA: 3.8	
Institut Polytechnique de Paris	2024-2025
Masters 2 Data Science	

💼 Work Experience

Research Intern | Sony R&D | Letter of recommendation   Stuttgart, January 2024 - June 2024

* Conducting experiments to understand and benchmark the impact of uncontrolled environments and the properties of images on 3D reconstruction out of 2D images.
* Created a fully automatic pipeline from image preprocessing, to 3D object reconstruction, and automatic mesh processing for evaluation purposes.
* Deployed a webapp to visualize and automate mesh alignment and comparison tasks.

Supervised by Facius, Z and Franchesci, R

Research Intern | Inria - SIMBIOTX | *Pytorch, 3D, Image processing, Segmentation*   Paris, May 2023 - November 2023

* Implemented and benchmarked the impact of Topology preserving losses on improving accurate 3D liver vessel segmentation and connectedness.
* Developed an image processing algorithm to transform single label vessel datasets into two-label datasets separating the portal and hepatic trees.
* Conducted a comprehensive statistical analysis of the morphometry of the obtained vessel trees while training a network to recognize perfusion volumes of the vessels. Wrote and submitted my first paper to MICCAI 2024 accepted to ADSMI workshop.

Supervised by Ali, O and Vignon-Clementel, I.

Data Science Intern | Cour Des Comptes | *R, Sphinx*   Paris, June 2022 - September 2022

* Conducted comprehensive data analysis on R, utilizing cartography and descriptive statistics techniques to create an overview of the French Airport Network.   **Supervised by** Grignon, P

</> Skills

Programming: Python (PyTorch, Scikit learn/image, Selenium, pandas, Numpy, matplotlib), Git, Slurm, Linux. learning $C++$, Godot and a bit of JS/CSS

🗺 Projects

* Paper reimplementation "Unsupervised Multi Modal Translation". Recipe generator and supermarket recommender according to fridge inventory, spatial proximity to supermarkets and diet, Time series forecasting, Monte Carlo simulations of the Lotka-Volterra model.
* Swarm intelligence search and rescue competition to experiment with multi agent reinforcement learning and trying to apply it to a personal game development project

♟ Clubs

ENSAE English Debating Team | *2022-2023*
Winners of the 2023 Grandes Ecoles FDA Tournament

IP Paris Racing Team | *2023-present*
I joined the **Driverless** team to deepen my skills in computer vision and model deployment.

🔤 Languages

* **Arabic** (Native)
* **French** (Native)
* **English** (C1)
* **Spanish** (A2)