





# Yassine Machta

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## INTERESTS

Currently working towards a PhD. Looking for a 3-month internship for this Summer (July-September) in Paris or Tunis. I am curious about Robotics, Machine perception and intelligence, Graphics and Rendering. I am also passionate about adaptive and immersive narrative and characters in interactive media.

## EDUCATION

<b>ENSAE Paris</b> <i>Engineering Curriculum : Data Science Statistics and Learning. GPA: 3.8</i>	2021-2025 <i>Planning to pursue research</i>
<b>Lycée Pierre de Fermat</b> <i>Undergraduate intensive course in advanced Maths and Physics</i>	2019-2021

## WORK EXPERIENCE

<b>Research Intern</b>   <b>Sony R&amp;D</b>   NeRFs	Stuttgart, January 2024 - June 2024
<ul style="list-style-type: none"><li>Created a fully automatic pipeline from image preprocessing, to 3D object reconstruction for evaluation purposes</li></ul> <b>Supervised by</b> <a href="#">Facijs, Z</a> and <a href="#">Francheschi, R</a>	

<b>Research Intern</b>   <b>Inria - SIMBIOTX</b>   <i>Pytorch, 3D, Image processing, Segmentation</i>	Paris, May 2023 - November 2023
<ul style="list-style-type: none"><li>Implemented and benchmarked the impact of Topology preserving losses on improving accurate 3D liver vessel segmentation and connectedness. Currently investigating additional methods</li><li>Developed an image processing algorithm to transform single label vessel datasets into two-label datasets separating the portal and hepatic trees</li><li>Conducted a comprehensive statistical analysis of the morphometry of the obtained vessel trees while training a network to recognize perfusion volumes of the vessels. Currently writing my first paper.</li></ul> <b>Supervised by</b> <a href="#">Ali, O</a> and <a href="#">Vignon-Clementel, I</a>	

<b>Data Science Intern</b>   <b>Cour Des Comptes</b>   <i>R, Sphinx</i>	Paris, June 2022 - September 2022
<ul style="list-style-type: none"><li>Designed and distributed a survey using Sphinx to assess public sentiment towards Paris' RER system and satisfaction with the metrics used by transporters.</li><li>Conducted comprehensive data analysis on R, utilizing cartography and descriptive statistics techniques to create an overview of the French Airport Network.</li></ul> <b>Supervised by</b> <a href="#">Grignon, P</a>	

## SKILLS

**Programming:** Python(PyTorch, Sickit, 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.
- Currently involved in a Swarm intelligence search an 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)