



# ACHRAF AIT SIDI HAMMOU

INTERNSHIP

## SKILLS

### Data Science

- Python, OOP, R
- Pytorch, Scikit learn, pandas, seaborn, networkx, Jupyter notebooks (and colab)

### Web Development

- *Backend*: NodeJS, GraphQL, Flask, Firebase, MongoDB, MySQL, PostgreSQL
- *Frontend*: React, NextJS, GatsbyJS, React Native, D3.js, Tailwind, Bootstrap
- *Others*: Figma, web scraping, AWS EC2, Scaleway

### Miscellaneous

- English - fluent (C1)
- Git / Github
- C++
- Matlab
- Project management

## CONTACT

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### Linkedin

[in/achraf-aitsidihammou](#)

### Github

[github.com/achrafash](#)

## EDUCATION

### ENSTA Paris - Applied Mathematics | 2019 - 2022 | 4.0 GPA

- One of the Top 10 French Engineering School, renowned for its research and academic excellence.
- Curriculum: Algebra, Topology, Calculus, Operations Research, Optimization, Monte Carlo Simulation, Statistics and Statistical Learning.

### Preparation class to enter top Engineering Schools | 2016 - 2019

- Advanced fundamentals in Maths (algebra, calculus, topology) and Physics.

### Medical School | 2015 - 2016

## EXPERIENCES

### • Research Internship | May-August 2021 | DaScim Polytechnique

Exploring linearly growing receptive fields in Graph Neural Networks.

### • Research Internship | June-August 2020 | ENSTA Paris

Evaluating image captioning models in the artistic domain (SemART, BibleSVA):  
*concepts: semi-supervised learning, embeddings, vgg19, encoder-decoder and siamese model*

### • Fullstack web freelance | June 2020 - March 2021

I developed web-based applications for a luxury brand, a university and a startup. From design, to backend and frontend. (React, Node, SQL)

## PROJECTS

### NLP Project for the French Navy | November - May 2021

I explored Machine Learning approaches to predict the destination of sailors from raw inputs (ex: "FRBES" for the input "Brest France").

Tasks: machine learning models (train/test/evaluation), data analysis, data cleaning  
Demo: <https://anais-ensta.netlify.app>

### Shape from Shading in C++ | February 2021

Estimating 3D shapes by observing shades in 2D images (LBFGS algorithm).

### Genetic Algorithm in Python | April 2020

Implementation in Python of a Genetic Algorithm with different techniques.

### Von Karman Simulation | Summer 2020

Modeling and simulation of Von Karman vortex in fluids with Matlab.

### Personal projects - web applications | 2020 - Today

- COVID application with data visualization and API of the French data.
- A fintech mobile application, a time-tracking tool, a content curation app, a cohort-based courses platform, and more.

## COMMITMENTS

### Early-member/co-founder of ENSTARTUP | 2019 - 2020

The very first association promoting Entrepreneurship at ENSTA through:

- interviews with alumni founders
- pitch competitions
- newsletters (fintech, research)
- workshops and hackathons

### Secretary-General - TAEP Junior-Enterprise | 2020

- Secretary tasks, in charge of data privacy and GDPR compliance
- HR - recruiting consultants and administrators
- Elaborating the strategy and tracking the activity with tools and metrics