Léandre ISKIN

ullet Montréal, QC ullet iskinleandre@gmail.com ullet FR : +33 6 88 98 18 65 ullet CA : +1 514-552-7556

in Léandre Iskin

Education

Polytechnique Montréal

 $Montr\'eal,\ QC,\ CA$

M.Eng in Computer Science

Sept 2023 - Now

- Double degree with ISAE-SUPAERO, Recruited on results through ISAE-SUPAERO
- o GPA: 3.4/4.0
- Coursework: Unsupervised Learning and Time Series, Stochastic Processes, Stochastic Calculus, Deep Learning, Regression analysis and Analysis of Variance, Artificial Intelligence: Methods and Algorithms

ISAE-SUPAERO Toulouse, FR

M.Sc. in Aerospace Engineering

Sept 2021 - Sept 2023

- Recruited through the Mines-Ponts competitive examination
- o GPA: 3.7/4.3
- Coursework: Fluid Mechanics and Thermodynamics, Advanced topics in mathematics, Markov chains, Monte-Carlo methods

Lycée Marcelin-Berthelot

Paris, FR

Preparatory Class

Sept 2019 - June 2021

- Preparatory classes for French engineering schools, focusing on advanced mathematics, physics, and engineering sciences.
- PCSI then PSI* student

Experience

Research Internship

Toulouse, FR

ISAE-SUPAERO Department of Complex Systems Engineering

May 2023 - Aug 2023

- Created techniques for image restoration and solving inverse problems in imaging
- Implemented advanced analysis and synthesis-based regularization methods using deep neural networks, including architectures like Auto-Encoders, U-Net, and GLOW.
- Conducted experiments revealing trade-offs: analysis-based methods retained more original data accuracy, while synthesis-based methods improved visual quality with fewer artifacts.

Commercial Associate

Paris. FR

HSBC Continental Europe

May 2022 - Aug 2022

Welcome clients, provide information, and sell simple banking products and services

Private Tutoring Paris Region, France, and Montreal, Canada

September 2020 - Now

- o Authored mathematics exercise books for high school for Académie Diderot
- Provided mathematics and physics tutoring at high school and undergraduate levels

Projects

Analysis and forecasting of meteorological time series

- o Forecasting time series using ARIMA and GARCH models on meteorological datasets
- o Tools Used: R

Implementation of PaLM

- Implemented Google's PaLM model for natural language processing to evaluate the scalability of large language models on a local computer.
- o Tools Used: Python, Pytorch

N-particle simulation

- o Implemented an N-particle simulation using both the naive method and the binary heap method
- o Tools Used: C, SDL2

Client/server interface for image processing

- Conceived a client/server interface that allows multiple users to simultaneously upload an image and process it using various filters
- o Tools Used: Java

Modeling and feasibility study for a microsatellite

- Conducted a feasibility study for a microsatellite designed to capture images of the Earth for meteorological analysis, involving detailed modeling to assess the satellite's technical specifications and operational viability for effective Earth observation
- o Tools Used: Orbital simulation tools, Energy calculation methods

Activities

Quality Audit and Information Systems Manager

Toulouse, FR
May 2022 - May 2023

SUPAERO Junior Consulting

- Facilitated 15+ project engagements for students, enabling hands-on experience with real-world challenges faced by clients
- The Quality, Audit, and Information Systems Manager at SUPAERO Junior Conseil oversees and advises the organization's management
- Ensured that actions taken improved client satisfaction and that services complied with client and regulatory requirements

Member of the Video Association Board at ISAE-SUPAERO

Toulouse, FR

JTS - Journal Télévisé de Supaero

May 2022 - May 2023

- Played a key role in shaping the association's positioning
- Produced monthly recap films highlighting student activities
- Participated in several award-winning short films at festivals (Evasion Rush 2023, Survol 48HFP Toulouse 2022)

Involvement in the French Karate Federation

- Achieved the first dan in karate in 2021.
- Participated in several karate tournaments, including the French Mixed Karate Championship (Vice Champion) and the French Full Contact Karate Cup (2nd place).
- Assistant instructor during sessions at my dojo.

Skills

Languages

French: Native English: Fluent Spanish: Intermediate

Programming languages: Python, C++, C, JAVA, R, Matlab, SQL

Technical Skills: Microsoft Office Suite, Adobe Suite, TIBCO Statistica, LaTeX