Ysaël Desage





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Mont Saint-Hilaire QC, Canada



/in/YsaelDesage/

Languages

French



English



Spanish



(Fluent)

Numerical Assets

Python

Docker

TensorFlow

• Git

LaTeX

Bash

Julia

Countries of Experience

United States

India

Mexico

Vietnam

France

Mayotte

Rwanda

Australia

Mali

• Costa Rica

Hobbies & Interests



Dance



Various Sports



Lifesaving



Nature & Outdoor



Martial



Movies & Cinema





Sailing

Profile

Resourceful application-oriented developer, with a significant research background and various industrial experiences. Highly adaptable, my focus revolves around problem-solving through the deployment of valuable solutions, ranging from fast off-the-shelf based deliverables, to custom cutting-edge approaches and infrastructures.

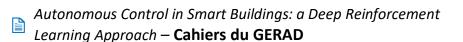
My background in physics provides me with a solid mathematical understanding and analytical intuition, blending holistically with artificial intelligence, operations research, control and modeling expertise to deliver innovative, performing and rigorous results.

Diplomas & Qualifications

Academia

PhD Electrical & Computer Engineering (in progress) McGill University	2023
M. Sc. Computer Science — Operations Research Université de Montréal & McGill University	2020
B. Sc. Physics — <i>Astrophysics</i> Université de Montréal	2018
TOEFL	2014
Lifesaving First Aid + National Lifeguard Instructor (Pool, Waterfront & Surf) Australian Bronze Medallion	2013 2018 2016

Publications



Conference Activities

Invited conf	Ference speaker, IVADO – Modern deployment	2021
🚺 success: blei	ference speaker, IVADO – Modern deployment nding artificial intelligence and operations research.	
Sponsored	panelist (BrainBox AI inc.), Unissu – AI-driven HVAC n: the next disruptive innovation in real estate.	2021
Invited conf	ference speaker, IGEE – Introduction to Machine engineers.	2020
Learning for	engineers.	
† Conference	speaker, journées de l'optimisation (JOPT)	2019

Involvement and Volunteering

Design et conception of cargo planes for inter-universities competitions	
Multidisciplinary projects Vamos Youth – Costa Rica	2018
Lifesaving and astronomy teaching workshops, community projects	
Lifesaving championships – Lifesaving Society	2018

Scholarships and Fellowships

\$ Industrial Fellowship (65 000\$) – Mitacs Accelerate 2019-2020

Cargo Plane technical society – Polytechnique Montréal

Athlete, member of the organizing committee, safety manager

Research Groups and Associations









2020

2017

Professional Experiences

Brainbox Al

Montreal (QC)

September 2019 – Now

BRAINBOX AI

Consultant

Operational infrastructure development and deployment.

Automation, Artificial Intelligence, physics-based modeling, control and operations research.

Optimal control software development

Master's project, Mitacs fellowship collaboration and scientific paper publication: Artificial Intelligence based prediction and control software development.

Sigma Energy Storage

Montreal (QC)

May 2017 - May 2019



Co-Research

Mitacs fellowship collaboration: Applied research and development in the energy sector: electrical demand forecasting, control, energy storage, energy markets and arbitraging.

Engineering internship

Heat exchanger and thermal storage feasibility study and modeling. Acoustic modeling.

Awn Nanotech

Montreal (QC)

January 2018 - May 2018



Research student

Atmospheric water extraction: theoretical model development for water nucleation on a functionalized carbon nanotubes membrane.

Succès Scolaire

Montreal Region (QC)

January 2017 - May 2017



Specialized tutoring

Individual academic tutoring for high school to first University cycle material. Included students with behavioral problems and learning difficulties.

SN Hawaii

Oahu (HI)

2018, 2019, 2020



Lifeguard instructor

Ocean rescue instructing, enriched program development, group management.

Corolla Beach Rescue

Corolla (NC)

Summer 2019

COROLLA ACH RESCH

Ocean lifeguard

Ocean rescue and training.