

ABOUT ME

I am a curious and creative person; I like overcoming professional challenges by bringing in innovative ideas.

SKILLS

ODEs & PDEs

Graphs

Machine learning

Deep learning

Simulation

Modeling

Optimisation

Signal processing

Optimal control

CFD

CSM

Finite Elements Method

Databases

Computer vision

CUDA

HPC

Networks

Web development

Cloud Computing

Multilingual

Flexibility

Teamwork

Adaptability


Communication


Rigor


Hard work


Efficiency


TOOLS


C/C++


Python


LaTeX


Jax


TensorFlow

Docker

Git

Flutter

Linux

Adobe

LANGUAGES

English

French

Japanese

Spanish

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ROUSSEL DESMOND NZOYEM

Looking for an internship in machine learning and scientific computing.

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RESEARCH EXPERIENCE

Interactive AI CDT Summer Project | UoB HPC Research Group

May 2022 - August 2022

Bristol, UK

Explored ways to accelerate algebraic multigrid linear solvers with machine learning (ML), namely Geometric Deep Learning and Graph Neural Networks.

MSc Internship | Jacques-Louis Lions Laboratory (Sorbonne University)

February 2021 - July 2021

Paris, FR

Studied the collapse of the Arctic ice cap via a percussive granular model of the MIZ. Ice floes were modelled with mass-spring-damper systems and fracture with the Francfort-Marigot model.

R&D Internship | Institut Recherche Mathématiques Avancées (IRMA)

June 2020 - August 2020

Strasbourg, FR

Inverse problem using ML (VNet) for the supervised reconstruction of a domain's density found by solving the radiative transfer equation (RTE) with a Finite Volume splitting scheme.

WORK EXPERIENCE

Volunteer Private Instructor | Complétude & ExamStar

January 2020 - Present

Strasbourg, FR & Bristol, UK

Weekly monitoring of high school students in mathematics and computer science with group tutoring during holidays.

Webmaster | Musica International

September 2019 - October 2019

Strasbourg, FR

Website management and maintenance of a music score database and a showcase website.

EDUCATION

PhD in Interactive Artificial Intelligence | University of Bristol

September 2021 - September 2025

Bristol, UK

Combining physics- and data-driven techniques for efficient mesh-free control of PDEs.

Master's degree (MSc) in Scientific Computing (CSMI) | University of Strasbourg

September 2019 - September 2021

Strasbourg, FR

Explored theoretical and practical aspects of deep learning, numerical methods for PDEs, etc.

Bachelor's degree (BSc) in mathematics | Aix-Marseille University

November 2017 - July 2019

Marseille, FR

Semesters 5 and 6 finalising my BSc with a particular accent on theoretical principles.

Advanced technician's certificate in mechatronics | Oshima College of Technology

April 2017 - June 2019

Oshima, JP

Intensive training focusing on mechanics, electronics, and computer science.

Associate degree in computer science | University of the People

January 2017 - April 2019

Pasadena, USA

Theoretical and applied computer science followed by web and software development projects.

HOBBIES

Coding video games
Music and cinema
Traveling
Football