# **ANAS MIFRANI**

118 Route de Narbonne, Building 1R1, Room 105 & Toulouse, France 31400 anas.mifrani@math.univ-toulouse.fr

Research interests: Multiple-criteria decision making, Markov decision processes, multiobjective optimization

### **EDUCATION**

## Ph.D. in Applied Mathematics

Since Oct. 2022

University of Toulouse, Toulouse, France Graduation expected 2025

## M.Sc.Eng. in Industrial & Systems Engineering

Sept. 2019 - Sept. 2022

Toulouse Graduate School of Chemical, Materials and Industrial Engineering, Toulouse, France

## Classes Préparatoires aux Grandes Ecoles (CPGE)

Sept. 2017 - Jun. 2019

Two-year intensive program for entrance into Moroccan and French engineering schools

Lycée Moulay Abdellah, Safi, Morocco

Majored in Mathematics & Physics

Ranked 113th nationwide out of 2400 candidates

### PROFESSIONAL EXPERIENCE

**Teaching Assistant** 

Since Oct. 2022

College of Science & Engineering, University of Toulouse

Toulouse, France

· Have been teaching mathematics to undergraduates on a selective pre-medical track, with topics ranging from real analysis and calculus to formal logic and set theory.

Research Assistant

Mar. 2022 - Aug. 2022

Toulouse Mathematics Institute

Toulouse, France

· Proposed & validated an algorithm for the automatic search, selection and configuration of linear regression models that, given a dataset, achieve satisfactory tradeoffs between conflicting statistical quality requirements.

Research Assistant

*Apr.* 2021 - *Aug.* 2021

Toulouse Mathematics Institute

Toulouse, France

- · Improved an existing mathematical model of tumor growth & response to radiotherapy.
- · Developed & implemented a decision support tool that recommends individualized radiotherapy fractionation schedules for hypothetical cancer patients. The model was used to simulate a patient's response to treatment, and reinforcement learning was employed to determine an optimal fractionation schedule.

**VBA** Developer

Jun. 2020 - Jul. 2020

Sans Cravate

Castanet-Tolosan, France

- · Developed a Microsoft Excel-based asset management tool.
- · Automated the collection & analysis of live stock market data.

### **SKILLS**

Science & Engineering Operations research, multiobjective optimization, machine learning, systems modeling

IT R, C++, SQL, MATLAB, Octave, Excel VBA

Languages Arabic (native), English (fluent), French (fluent)

Other Duke University's Data Science Math Skills certificate (July 2020)