

# NICOLAS SCHLEGEL

Engineer in Applied Mathematics - 2<sup>+</sup> years of experience

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## Education

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### Ecole des Ponts Paristech (ENPC)

*Master's Degree in Engineering, major in Applied Mathematics, GPA : 3.95/4*

Sep. 2018 – Sep. 2022

*Champs-sur-Marne, France*

### Master Parisien de Recherche Opérationnelle (MPRO)

*Master's of Science in Operations Research, GPA : 4/4*

Sep. 2021 – Sep. 2022

*Master thesis on Robust Decarbonisation Policies, supervised by Michel De Lara (CERMICS, ENPC)*

*Paris, France*

### Lycée Pierre Corneille

*Preparatory class for entrance to Grandes Écoles*

Sep. 2015 – June 2018

*Rouen, France*

## Relevant Coursework

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- Operations Research
- Stochastic Optimization
- Statistics
- Data Science
- Machine Learning
- Software Development
- Game Theory
- Economy

## Experience

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### RFF - CMCC European Institute on The Economics and Environment

*Research Associate (R, GAMS)*

Nov. 2023 – ...

*Milan, Italy*

- Involved of the continuous improvement of the integrated assessment model WITCH
- In charge of the modeling of industrial sectors energy demand

### Malt (Freelance platform)

*Freelancer (Python)*

Sept. 2023 – Oct. 2023

*Paris, France*

- Carried out four Data Science missions for various clients

### Citepa (Air Pollution study center)

*6 months as Intern - 8 months as Project Engineer (Python, Excel)*

April 2022 – June 2023

*Paris, France*

- Developed a Python library for planning and optimising the decarbonisation of economic agents under uncertainty
- Analysed French corporate carbon footprint database, assessed the carbon imprint of a major bank portfolio
- Developed visualisation tools for corporate carbon footprints comparison

### EDF R&D / LIP6 (Computer laboratory)

*Operations Research Intern (Julia, HTML, Javascript, CSS)*

Jan. 2021 – July 2021

*Paris, France*

- Worked on a Vehicle Routing Problem for Enedis (French network operator), modelling the tours of its technicians
- Implemented special constraints of synchronisation and teamwork
- Explored an heuristic solving approach of "graph decimation"

### Artelys (Optimization consulting firm)

*Data Science Intern (Python, Excel)*

Jun. 2020 – Dec. 2020

*Paris, France*

- Generated test years of climate hazards and electricity demand for network adequacy assessment
- Assessed the French 2050 demand for voltage transformers
- Predicted arrival times of Parisian buses
- Developed a Monte-Carlo-Tree-Search algorithm for flight trajectory planning

### Thales Training and Simulation

*Software Development Intern (Javascript, CSS)*

June 2019 – Aug. 2019

*Cergy, France*

- Designed and animated helicopter simulator panels

## Technical Skills

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**Computer Science:** Python, R, GAMS, JavaScript, HTML/CSS, SQL, Linux, Git, Latex

**Languages:** French (native), English (fluent), Italian (basics), Spanish (basics)