

# SACHA MEDAER

## Looking for a PhD at the intersection of Computer Sciences and Physics Engineering

@ sachamedaer.me    +32471048908    Brussels    Europalaan 13, Hoeilaart 1560, Belgium  
in [linkedin.com/in/sacha-medaer/](https://www.linkedin.com/in/sacha-medaer/)    [github.com/sachamedaer/](https://github.com/sachamedaer/)

## EDUCATION

Master degree in Advanced Optical Technologies

**Friedrich-Alexander Universität**

📅 2020    📍 Nuremberg, Germany

- Majors: Computational Optics & Optics in Communication and Information Theory
- Final grade: First-class

Master degree in Computational Engineering

**Friedrich-Alexander Universität**

📅 2020    📍 Nuremberg, Germany

- Majors: Digital Communication & Machine Learning
- Final grade: Upper second-class (2:1)

Bachelor degree in Physics Engineering

**Université Libre de Bruxelles**

📅 2017    📍 Brussels, Belgium

Bachelor degree in Computer Sciences

**Université Libre de Bruxelles**

📅 2017    📍 Brussels, Belgium

World Tour - Work & Travel Visa

📅 2013    📍 USA, Australia, Thailand

High-school Degree

📅 2012    📍 Nivelles, Belgium

## EXPERIENCE AND PROJECTS

Deep Reinforcement Learning for the Planning of Liver Tumor Thermal Ablation

**Siemens Healthineers - Artificial Intelligence Group**

📅 2020    📍 Erlangen, Germany

Simulation of a Figure-of-eight All-normal-dispersion All-in-fiber Regenerative Hybrid Harmonic Mode-locked Laser

**Max Planck Institute for the Science of Light - Pr. Schmauss Associated Group**

📅 2020    📍 Erlangen, Germany

Optcom: Open-Source Optical System Simulator ([Github](#))

**Founder**

📅 2019    📍 Germany

Simulation of a Pulse Stretcher concept for Ultrashort Pulse Fiber Laser Systems

**Max Planck Institute for the Science of Light - Pr. Schmauss Associated Group**

📅 2019    📍 Erlangen, Germany

Study of Multiple Correlated Responses in a Surrogate-based Framework

**Cenaero - Simulation Technologies for Aeronautics**

📅 2018    📍 Charleroi, Belgium

Reduction of the Word Equation Problem for a SAT Resolution

**Université Libre de Bruxelles - Computer Sciences Departement**

📅 2017    📍 Brussels, Belgium

## SOFT SKILLS

Problem-solving    Positive attitude  
Team-player    Reliable    Tenacity  
Respectfulness    Communicative

## EXTRA-CURRICULAR

- Ambassador of Schola ULB
- Treasurer of the Board of European Students of Technology ULB
- Founder of BADUM music band
- Piano and Saxophone player
- Delegate of Polytechnic Circle ULB
- Brussels Student Song Festival organizer
- Football player (RES - AFCCM - RCS)
- Volunteer at Oxfam

## PROGRAMMING

Python    C++    C    Java    Matlab/Octave  
LaTeX    Mysql    PHP/CSS

## LANGUAGES

French  
English  
German  
Spanish  
Dutch



## INTERESTS

Music    Sports    Travelling  
Learning languages    Craft-work  
Volunteering    Open-source

## STUDENT JOBS

- Pedagogic expert at Libraries Without Borders
- High-school Tutor at Schola ULB
- Teacher (private lessons)
- Waiter & Bartender
- Photographer at Gotcha
- Financial department assistant at Mastercard
- Sales manager assistant at Van Eyck Solutions