Mathematical problemsolver with flair for AI and optimization

# Jonas Søeborg Nielsen


+45 24 64 98 84
jonassoeborgnielsen@icloud.com
https://www.linkedin.com/in/jonassoeborgnielsen
Kongens Lyngby, Copenhagen


## PROGRAMMING

Python, Julia, Matlab, C/C++, R, Java, SAS, HTML, New?

## LANGUAGES

**Danish** Native
**English** Fluent
**German** Basic

## ABOUT ME

I am an active and curious person who keeps both body and mind engaged through fitness, running, climbing, and strategic games. I enjoy board and computer games, especially those requiring strategy and cooperation. I often combine solo gaming with watching entertainment, news, or documentaries on YouTube. My interests enhance both my mental and physical abilities and help me develop skills in collaboration, strategy, discipline, and learning. I find it motivating to work with new people and experience how their perspectives and strengths complement my own.

## REFERENCES

megajosni.github.io

## PROFESSIONAL PROFILE

As an engineer in Mathematical Modelling and Computation, I have a strong passion for applying mathematical and data-driven methods to understand and solve complex real-world problems. Through my education, specialized courses, and projects, I have gained solid experience in machine learning, deep learning (AI), simulation, scientific computing, and optimization. I work in a structured, analytical, and goal-oriented way to develop robust solutions, and thrive with challenges that both test my skills and provide opportunities for professional development. Even when facing something unfamiliar, I'm confident in my ability to learn it - quickly and effectively.

## CORE COMPETENCIES

- ✓ **Mathematical Modelling**
- ✓ **Machine Learning**
- ✓ **Numerical Algorithms**
- ✓ **Technical Communication**
- ✓ **Optimization**
- ✓ **Data Analysis**
- ✓ **Simulation**
- ✓ **Collaboration**

## EDUCATION

### MSc Eng Mathematical Modelling and Computation // DTU

**Sep. 2022 – Mar. 2025**

I have specialized in machine learning techniques focusing on deep learning, computer vision, Bayesian and model-based machine learning, computational data analysis, and high-performance computing. My thesis involved a deep investigation into Universal Physics-Informed Neural Networks for discovering hidden/unknown dynamics in dynamical systems.

### BSc Eng Mathematics and Technology // DTU

**Sep. 2019 – May 2022**

I have acquired fundamental knowledge and skills in applied mathematics and data-driven techniques with a focus on mathematical modelling, optimization, and numerical methods through courses in machine learning, graph theory, image analysis, operations research, numerical algorithms, simulation, statistics, probability, advanced mathematics, and programming.

## EXPERIENCE

### Teaching Assistant // DTU

**Sep. 2024 - Dec. 2024**

As a teaching assistant in the courses Deep Learning, Introduction to Programming, and Multivariate Statistics, I have developed strong skills in communicating technically complex topics to individuals with limited prior knowledge, which has strengthened my abilities in both communication and technical guidance.

### Service Employee // McDonald's Hillerød

**Jul. 2014 - Oct. 2021**

I developed strong teamwork and communication skills while working in a fast-paced environment, where I learned to handle multiple tasks efficiently and maintain a positive attitude under pressure.