# Edoardo Mangia

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### Education

University of Padua — Padua, Italy B.Sc. Industrial Engineering (Sept. 2020 - Jan. 2024)

Relevant Coursework: Computer Science (30/30) - Operations Research (30/30) - Electrotechnics (28/30)

Chalmers University of Technology — Gothenburg, Sweden(Sept. 2024 - Sept. 2026)M.Sc. Engineering Mathematics

Relevant Coursework: Parallel Computing - HPC - Nonlinear Optimization - Machine Learning

# Experience

**ASML** — Veldhoven, Netherlands *Physics Intern (Incoming)* 

The internship will focus on developing software solutions to address particle contamination challenges on the reticle in EUV scanners. More practically, this involves software engineering and scientific computing using Python, Julia, and MATLAB. This internship will keep me occupied during the spring, with flexibility in the schedule to allow for the start of another internship afterward.

#### Skills

Programming Languages (Python, C, C++, Julia, MATLAB, SQL, R, Rust)

Machine Learning (TensorFlow, PyTorch, NumPy, SKLearn, Colab, Jupyter)

Parallel Computing (CUDA, OpenMP, OpenCL, MPI)

Linux and Bash Scripting (vim, coreutils, gdb, ssh, logstash, hyperfine)

Cloud Computing (AWS, GCP, Docker, Kubernetes)

ETL and Data Integration (Hadoop, Spark, AWS Glue)

# Projects (GitHub)

Replicated and reimplemented research papers of personal interest.

Wrote machine learning models using the TensorFlow library.

University projects in Parallel Computing, Mathematical Modelling and Optimization, Bayesian Machine Learning and Scientific Visualization.

# Languages

English (IELTS C1 - TRF: 2420000034MANE1IHA)

French, Spanish and Russian (basic conversational level)

Swedish (...work in progress)

(Jan. 2025 - May. 2025)