LUCIA SIROTTI

📍 Forlí (FC), Italy
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EDUCATION

June 2025 - Present	**Postdoc at the Department of Industrial Engineering**
	Alma Mater Studiorum - University of Bologna
Mar. 2024 - June 2024	**Visiting Scholar at Texas A&M University**
	Dep. of Nuclear Engineering, Texas A&M University, College Station, Texas, USA
	PROJECT: 3D multi-physics simulation of the steady state regime of the lead fast nuclear reactor (ALFRED), using the OpenFOAM based application, named GeN-FOAM.
Jan. 2022 - June 2025	**PhD in Mechanics and Advanced Engineering Sciences**
	Alma Mater Studiorum - University of Bologna
	TITLE: Development of a CFD tool for turbulent natural convection and heat transfer simulations of liquid metals.
July 2021	**Qualifying examination for the profession of INDUSTRIAL AND INFORMATION ENGINEER** Final Mark 59/60
	Alma Mater Studiorum - University of Bologna
Dec. 2018 - Mar. 2021	**Master's Degree in Energy Engineering** Final Mark 110L/110
	Alma Mater Studiorum - University of Bologna
Sept. 2015 - Dec. 2018	**Bachelor's Degree in Energy Engineering** Final Mark 110L/110
	Alma Mater Studiorum - University of Bologna

WORK AND TEACHING EXPERIENCE

Feb. 2025 - June 2025	**Teaching Tutor for *Foundations of Informatics***
	Course of BCs Energy Engineering at University of Bologna
Sept. 2023 - Dec. 2023	**Teaching Tutor for *Foundations of Informatics***
	Course of BCs Mechanical Engineering at University of Bologna
Feb. 2023 - June 2023	**Teaching Tutor for *Foundations of Informatics***
	Course of BCs Energy Engineering at University of Bologna
Feb. 2022 - June 2022	**Teaching Tutor for *Foundations of Informatics***
	Course of BCs Energy Engineering at University of Bologna
May 2021 - Dec. 2021	**Software Engineer**
	Nier Ingegneria S.p.a.
	Main activity: development of critical software components (C programming language)

ADVANCED SCHOOL COURSES

July 2025	**High-Performance Computing: A New Challenge in Wind Engineering – WE-HPC**
	ANIV - ICSC - DICAM Unibo
January 2024	**Core Modelling For Transient**
	GRE@T-PIONEeR project

July 2023	**Summer School on Parallel Computing**
	CINECA Academy
March 2022	**Introduction to Parallel Computing with MPI and OpenMP**
	CINECA Academy
February 2022	**Introduction to Python programming**
	CINECA Academy
June 2021	**Introduction to Web-Technologies**
	Nier Software Academy - Nier Ingegneria S.p.a.
April 2021	**Introduction to Scientific and Technical Computing in C and C++**
	CINECA Academy

CONFERENCES

May 2025	**COUPLED PROBLEMS 2025**
	XI International Conference on Coupled Problems in Science and Engineering
September 2023	**ICNAAM 2023**
	21st International Conference of Numerical Analysis and Applied Mathematics
June 2022	**ECCOMAS CONGRESS 2022**
	8th European Congress on Computational Methods in Applied Sciences and Engineering

TECHNICAL SKILLS

- Four years of experience with academic CFD code development (C++), Pre-Post processing tools (Salome - Paraview) in a Linux environment.
- Sound knowledge of PDE discretizations, multigrid methods, finite elements and finite volumes.
- Familiar with parallel computing with MPI.

Operating System: Windows, Linux
Programming Languages:

    C/C++: Upper Intermediate

    Python: Intermediate

    MATLAB: Familiar

Software:

    OpenFOAM: Upper Intermediate

    Ansys meshing tools: Intermediate

    Comsol Multiphysics: Familiar

LANGUAGES

Italian: Native Speaker
English: Upper Intermediate
       IELTS Certification: level B2 - 2020

Bologna, 15/07/2025