

# CRISTIAN TATU COMPUTER SCIENTIST

+34 642 996 785

cristian.cat.tatu@gmail.com



https://www.linkedin.com/in/ctatu/



## WORK EXPERIENCE

(2021-Present) Research Engineer Barcelona Supercomputing Center

- Publishing and presenting papers in multiple international conferences
- Maintaining distributed machine learning library (dislib)
- Developing GPU Cache support for multi-node cluster execution
- Development and validation of machine learning models
- Implementing distributed scientific algorithms
- Big data analytics
- Distributed deep learning training

(2020-2021) **R&D Intern** Ericsson

#### **PROJECTS**

- ▶ Full Stack Mobile App for Transportation Company (including analytics) La Central Del Transportista
- Conditional Generation on Neural Implicit Networks Personal Project (May 2025 - Present)
- Deep Neural Network for voice classification **Personal Project** (Mar 2025 - May 2025)
- Workflow Orchestration for CFD Reinforcement Learning

**Barcelona Supercomputing Center** (Nov 2024 - Feb 2025)

- GPU Cache for Distributed Computing Framework **Barcelona Supercomputing Center** (Jan 2024 - Aug 2024)
- Distributed Matrix Decomposition for CFD data **Barcelona Supercomputing Center** (Jan 2023 - Jan 2024)

### EDUCATION

Master's Module in Software Design (2020-2021) UNIVERSIDAD POLITECNICA DE MADRID

- Modular Design
- Object-Oriented Design
- Design Patterns
- Software Architecture

COMPUTER SCIENCE (2016 - 2020) UNIVERSIDAD AUTONOMA DE MADRID

#### LANGUAGES



Spanish

**Native** 



English

**Proficient** 



Romanian

**Native** 

#### **PUBLICATIONS**

- Parallel reduced-order modeling for digital twins using high-performance computing workflows Science Direct - (Sep 2025)
- GPU Cache System for COMPSs: A Task-Based Distributed Computing Framework

Springer - (Aug 2024)

 Scalable Random Forest with Data Parallel Computing Springer - (Aug 2023)

## **SKILLS & SOFTWARE**

Public Speaking, Team Planning, Programming, Software Development, Research, Data Analysis, Software Architecture, Modular Design, Academic Writing, Software Optimization, Python, Java, TensorFlow, PyTorch, scikit-learn, Keras, Docker, Flask Framework, Jupyter Notebook, SQL, PostgreSQL, REST, API, Deep Learning, Machine Learning