

CONTACT

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PROFESSIONAL  
EXPERIENCE

- Software Engineer | Primeur Srl, Milan (Italy) | 06/2023 - Present**
- **Leading end-to-end ML project** for pattern recognition in large-scale event timing datasets, implementing clustering algorithms to identify recurring patterns and developing supervised learning pipeline for anomaly detection
  - **Developed automated migration module** for transition from legacy application to new system, automatically exporting configurations and mapping all functionalities
  - **Secured enterprise Java applications** against OWASP Top Ten vulnerabilities
  - **Built and maintained CI/CD pipelines** using Jenkins and Docker
  - **Presented technical demos** of new applications and features during company training sessions
- IT Analyst | Cams Srl, Bologna (Italy) | 01/2022 - 04/2023**
- **Automated several IT workflows** improving operational efficiency
  - **Designed and developed company website** and customer care systems

TECHNICAL  
PROJECTS

- Custom Tensor Operations Library | Personal Project, Ongoing**
- Implementing high-performance tensor multiplication in C with SIMD vectorization
  - Benchmarking parallelization strategies and memory optimization techniques
  - Measuring performance gains across different computational approaches and optimization levels
- Deep Learning Foundation | Personal Study, Current**
- Building and training neural networks from scratch to understand fundamental architectures
  - Implementing various classification and regression models using PyTorch
  - Studying optimization techniques, activation functions, and regularization methods

EDUCATION

**Bachelor of Physics, First Class with Honors | University of Bologna | 2023**

TECHNICAL  
SKILLS

**AI/ML:** Supervised learning, Unsupervised learning (clustering), Anomaly detection, Neural network architectures, Deep learning fundamentals, Pattern recognition

**Systems & Performance:** Memory optimization, Vectorization (SIMD), Parallelization, Performance benchmarking, Low-level programming

**DevOps & Administration:** Linux administration, End-to-end CI/CD workflows, Multi-node containerized environments (Docker Compose), Legacy build systems management

TOOLS

**AI/ML & Data Science:** PyTorch, Scikit-learn, Numpy, Pandas, Jupyter Notebook

**Development & DevOps:** Linux, Windows, Bash, PowerShell, Docker, Docker Compose, Make, Poetry, Maven, Jenkins, Git/Github/Bitbucket

**Databases & Servers:** PostgreSQL, H2, MongoDB, OpenLiberty, TomEE

**Programming Languages:**

- *Major:* C, Python, Java (8-21)
- *Minor:* JavaScript, Groovy