

PERSONAL INFORMATION **Flavia Monti**

EDUCATION

2021 – 2025 Ph.D. in Engineering in Computer Science

Sapienza Università di Roma, Rome, Italy

Thesis Achieving Resiliency in Smart Manufacturing through Artificial Intelligence

Advisor Prof. Francesco Leotta

2018 – 2021 Master's Degree in Engineering in Computer Science

Sapienza Università di Roma, Rome, Italy

Thesis Vision based real-time die cutting defect detection

Advisor Prof. Francesco Leotta

2014 – 2018 Bachelor's Degree in Engineering in Computer Science and Automation

Sapienza Università di Roma, Rome, Italy

EXPERIENCES

2024 – current Post-doctoral researcher

Sapienza Università di Roma, Rome, Italy

Research Interests Industry 4.0 and Smart Manufacturing. Specifically the integration of new technologies and approaches like computer vision, machine learning and artificial intelligence with the purpose of improving production quality, reducing costs, increasing machinery uptime, analyze failures and defects towards zero defect manufacturing.

2024 Software Engineer

Analysis and development of computer vision techniques applied to quality control in industrial systems, Sapienza Università di Roma, Rome, Italy

Jan - Mar 2024 Visiting Researcher

TUM School of Computation, Information and Technology. Technical University of Munich, Munich (Germany).

Sep 2022 Visiting Researcher

Department of Electrical Engineering & Information Technologies. Cyprus University of Technology, Limassol (Cyprus).

Jul 2022 Summer School On Service-Oriented Computing

Hersonissos, Crete

2021 Software Engineer

Development of an image processing prototype for Industry 4.0., Sapienza Università di Roma, Rome, Italy

TEACHING ACTIVITIES

A.Y. 2024/25 Adjunct Professor

Fondamenti di Informatica (ING-INF/05 (IINF-05/A) – 6 out of 12 CFU), B.Sc. in Engineering in Management Science, Department of Computer, Control and Management Engineering, Sapienza Università di Roma, Rome, Italy

A.Y. 2024/25 **Lecturer**

Metodologie di Analisi e Progettazione del Software (UML) (26 hours), ITS Academy Lazio Digital

A.Y. 2024/25 **Teaching Assistant**

Progettazione del Software (ING-INF/05 (IINF-05/A)), B.Sc. in Computer and System Engineering, Department of Computer, Control and Management Engineering, Sapienza Università di Roma, Rome, Italy

A.Y. 2023/24 **Teaching Assistant**

Progettazione del Software (ING-INF/05 (IINF-05/A)), B.Sc. in Computer and System Engineering, Department of Computer, Control and Management Engineering, Sapienza Università di Roma, Rome, Italy

A.Y. 2022/23 **Teaching Assistant**

Progettazione del Software (ING-INF/05 (IINF-05/A)), B.Sc. in Computer and System Engineering, Department of Computer, Control and Management Engineering, Sapienza Università di Roma, Rome, Italy

A.Y. 2022/23 **Lecturer**

Metodologie di Analisi e Progettazione del Software (UML) (34 hours), ITS Academy Lazio Digital

A.Y. 2021/22 **Teaching Assistant**

Progettazione del Software (ING-INF/05 (IINF-05/A)), B.Sc. in Computer and System Engineering, Department of Computer, Control and Management Engineering, Sapienza Università di Roma, Rome, Italy

SERVICE

Proceedings Chair

21st International Conference on Service-Oriented Computing, ICSOC 2023.

Publication Chair

23rd International Conference on Service-Oriented Computing (ICSOC 2025), 21st International Conference on Service-Oriented Computing (ICSOC 2023).

Program Committee Membership

3rd IEEE Conference on Artificial Intelligence (IEEE CAI 2025), 21st Conference on Information and Research Science Connecting to Digital and Library Science (IRCDL 2025), 1st Workshop on Large Language Models for Service-Oriented Architectures and Systems Design (LLM-SOA 2025), Artificial Intelligence x Science, Engineering, and Technology (AIxSET 2025).

Reviewer

2025 IEEE International Conference on Web Services (ICWS 2025), 6th International Conference on Process Mining (ICPM 2024), Women in Computer Vision workshop (WiCV 2024 @ECCV 2024), 5th International Conference on Process Mining (ICPM 2023), 31st Symposium on Advanced Database Systems (SEBD 2023), Journal of Data and Information Quality (JDIQ), IEEE Transactions on Services Computing (TSC), Journal of Data Science and Engineering (DSEJ), International Journal on Digital Libraries (IJDL).

PERSONAL SKILLS AND COMPETENCES

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Computer skills

- Programming languages: JAVA, PYTHON, C, C# (.NET), SQL
- Libraries: OPENCV
- Development Tools: Git (Version Control), Docker, Eclipse, Visual Studio, Visual Studio Code
- Operating Systems: Microsoft Windows, Unix
- Programs: Microsoft Office, LaTeX

SOFTWARE PROJECTS

Software projects are available at <https://github.com/iaiamomo>.

PROJECTS

2024 – current **GenDAI – Genomic applications for laboratory Diagnostics supported by Artificial Intelligence**

The goal of GenDAI is to create an innovative medical diagnostics platform that uses Artificial Intelligence and microbiome profiling to deliver personalized, high-precision diagnostic results, supporting both research and clinical applications.

2022 – 2025 **Electrospindle 4.0**

The goal of Electrospindle 4.0 is to apply innovative technologies to realize a family of Zero Defects products (spindles), produced through a Zero Defects Manufacturing process
 In the Electrospindle 4.0 project, my work primarily involved supporting research and contributing to the development of early stage solutions for managing data analyses.

2021 – current **Fustella 4.0 – Rotalaser Industrial Project**

The aim of Fustella 4.0 is the development of a die cutter 4.0 to improve production process.
 My work on TopKontrol project is primarily focused on the development of a computer-vision software component, able to identify, in real-time, cardboard defects during production. Moreover, my work is also focused on the improvement of a monitoring software component responsible to collect, via Bluetooth low energy sensors, usage data of the die cutters machine component.

2022 – 2023 **BinTraWine – Blockchain, Tracking and Tracing solutions for Wine**

The aim of BinTraWine is to employ blockchain technology for traceability in the wine supply chain

2021 – 2022 **DESTINI H2020 Twinning Project – Smart Data Processing and Systems of Deep Insight**

The aim of DESTINI is to facilitate transfer of scientific knowledge and expertise, as well as of best research practices from the leading institutions to Cyprus University of Technology.

TALKS

2024 **Invited talk**

Toward Agile Business Processes in Smart Manufacturing through Artificial Intelligence, Francesco Leotta, Flavia Monti, Workshop on Business Process Management and Process Mining, University of Oxford, Oxford, England

2024 **Tutorial**

Engineering Information Systems with LLMs and AI-based techniques, Massimo Mecella, Marco Calamo, Flavia Monti, 36th International Conference on Advanced Information Systems Engineering, CAiSE 2024, Limassol, Cyprus

2023 **Tutorial**

Services in Industry 4.0. Modeling and composition for agile supply chains., Francesco Leotta, Flavia Monti, Luciana Silo, 21st International Conference on Service-Oriented Computing, ICSOC 2023, Rome, Italy

2023 **Tutorial**

Services in Industry 4.0. Modeling and composition., Francesco Leotta, Massimo Mecella, Flavia Monti, Luciana Silo, 17th Symposium and Summer School on Service-Oriented Computing, SummerSOC 2023, Hersonissos, Crete, Greece

2022 **Tutorial**

Engineering Information Systems in Smart Manufacturing, Francesco Leotta, Massimo Mecella, Flavia Monti, 34th International Conference on Advanced Information Systems Engineering, CAiSE 2022, Leuven, Belgium

2022 **Panel speaker**

AI, AR and governance in manufacturing and I4.0/I5.0, Geert Poels, Andrei Bertic, Raimundas Matulevičius, Flavia Monti, Erik Proper, 34th International Conference on Advanced Information Systems Engineering, CAiSE 2022, Leuven, Belgium

2022 **Invited talk**

Transformation in Traditional Industry: Die Cutter 4.0, Jerin George Mathew, Flavia Monti, Second School on Smart Data Processing and Systems of Deep Insight, DESTINI H2020

PUBLICATIONS

For the list of publications please refer to the following pages on Google Scholar (Pegkmv-CAAAAJ), Scopus (57278490100), ORCID (0000-0003-3349-7861), dblp.

La sottoscritta, consapevole che – ai sensi dell’articolo 76 del D.P.R. n. 445/2000 – le dichiarazioni mendaci, la falsità negli atti e l’uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali, dichiara che le informazioni rispondono a verità. Il sottoscritto in merito al trattamento dei dati personali esprime il proprio consenso al trattamento degli stessi per le finalità e con le modalità di cui al decreto legislativo 30 giugno 2003, n. 196, come modificato dal decreto legislativo 10 agosto 2018, n. 101, recante Disposizioni per l’adeguamento della normativa nazionale alle disposizioni del Regolamento (UE) 2016/679 del Parlamento europeo e del Consiglio, del 27 aprile 2016, relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali, nonché alla libera circolazione di tali dati e che abroga la direttiva 95/46/CE (Regolamento Generale sulla Protezione dei dati).

Roma, 31 Ottobre 2025