

Direzione Innovazione e Internazionalizzazione

> ID VP056_INF/MAN

Visiting Professor Program Academic Year 2024/2025

TEACHING COMMITMENT: 20 hours

COURSE TITLE Process Mining on Information Systems

TEACHING PERIOD 2nd term

SCIENTIFIC AREA Computer Science

LANGUAGE USED TO TEACH English, Italian

COURSE SUMMARY

PhD Course:

The course provides an introduction to data-driven process analysis and improvement, with reference to the discipline of Process Mining.

Techniques for transforming event data collected from any type of recording system, e.g. enterprise information systems, into insights into corresponding processes are presented.

The main topics of tuition concern the discovery and automated analysis of flexible processes, the analysis of process compliance, and on-line monitoring and prediction to support process managers in making decisions regarding current process executions, e.g. to react to potentially undesirable situations.

Sistemi Informativi e gestione delle reti aziendali:

1

The course provides an introduction to techniques and tools of the Process Mining discipline. An overview of data-drive process analysis on enterprise information systems with practical examples of discovery, conformance checking, and enhancement are presented.

The teaching discusses the methods, algorithms and tools of Process Mining for the automated analysis of flexible processes, monitoring and decision-making support of organisations.

LEARNING OBJECTIVES

- Familiarise with the methods, algorithms and tools of Process Mining for the automated analysis of flexible processes;

- Introduce algorithms and techniques of Process Discovery;
- Variant analysis of business processes;
- Conformance checking techniques;
- Support monitoring and decision-making of organisations.

VISITING PROFESSOR PROFILE

Strong experience in Process Mining, Business Process Management. Research on data-driven process analysis with techniques and tools from the Process Mining discipline. Expertise in data analysis to support decision-making based on event data collected from logging systems.

CONTACT REFERENT

Emilio Sulis emilio.sulis@unito.it