# Introdução Engenharia Informática

Mário Antunes September 15, 2025

Universidade de Aveiro

#### **Professors**

· Name: Mário Antunes

• E-Mail: mario.antunes@ua.pt

• Office: 19.2.15 (IT1)



#### **Professors**

 Name: Joaquim Sousa Pinto

• E-Mail: jsp@ua.pt

• Office: 24.0.05 (IEETA)



#### **Class Introduction**

#### Covering the following topics:

- C1. Introduction to Command Line
- C2. Virtualization and Containers
- C3. Code Versioning and Collaboration
- C4. IP Networking Communication
- C5. Web Servers and Technology
- C6. Semistructured Data Manipulation
- C7. Document Compilation (Latex and Markdown)
- C8. GDPR, Intellectual Property, Ethics, and Professionalism in IT

### Grading

- 50% Theory + 50% Practice
- Discrete: 25% Project 1 + 25% Project 2 + 50% Exam
- Final: 50% Final Exame + 50% Project

#### **Class Schedule**

Date TP1/2	Date TP3	Date TP4	Topic	Description
15-09-2025	17-09-2025	18-09-2025	C0	Setup
22-09-2025	24-09-2025	25-09-2025	C1	Linux terminal
29-09-2025	01-10-2025	02-10-2025	C1	Windows terminal
06-10-2025	08-10-2025	09-10-2025	C2	Virtualization
13-10-2025	15-10-2025	16-10-2025	C2	Containers
20-10-2025	22-10-2025	23-10-2025	C2	Application containers
27-10-2025	29-10-2025	30-10-2025	C3	Git & Github
03-11-2025	05-11-2025	06-11-2025	C4	Network configuration
10-11-2025	12-11-2025	13-11-2025	C4	Network programing
17-11-2025	19-11-2025	20-11-2025	C5	WebPage & deployment
24-11-2025	26-11-2025	27-11-2025	C5	Web programming
15-12-2025	03-12-2025	04-12-2025	C6	Data visualization
22-12-2025	10-12-2025	11-12-2025	C7	Latex & Markdown
	17-12-2025	18-12-2025	C8	GDPR, AI Act, Intelectual property

## **Bibliography**

- James F. Kurose and Keith W. Ross. 2021. Computer Networking: A Top-Down Approach (8th edition).
  Pearson.
- Python Networking 101: Navigating essentials of networking, socket programming, AsyncIO, network testing, simulations and Ansible, Odette Windows, GiftforGits, 2023
- Mailund, Thomas 2019 Introducing Markdown and Pandoc: Using Markup Language and Document Converter
- William Shotts 2019 The Linux Command Line, 2nd Edition - A Complete Introduction
- Paul McFedries 2023 HTML, CSS, & JavaScript All-in-One For Dummies