Leonardo Tonelli

leonardotonelli03@gmail.com | LinkedIn | Personal Website | GitHub

EDUCATION

BOCCONI UNIVERSITY

Milan, Italy Sept 2022 - Present

Title: BCs in Economics, Management and Computer Science (English) **Expected Final Mark:** 110/110 Cum Laude

Current GPA: 29.33/30.00

Scholarships: National scholarship "Fondo Previdenza Mef" (2000€) based on academic merit (1st year of study)

Relevant coursework: Advanced Statistics, Econometrics, Applied Mathematics, Machine Learning, Computer Programming,

Computer Science, Big Data and Databases, Game Theory, Finance, Microeconomics, Macroeconomics.

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

Singapore,

Title: Exchange Student in Business & Computing programme

Jan 2025 - Present

90th percentile over 1179 exchange undergraduate winning applicants' scores.

Relevant coursework: Planning to attend courses in Real Analysis, Differential Equations and Intelligent Agents.

PROFESSIONAL EXPERIENCES

RESEARCH ASSISTANT - Bocconi University

Milan, Italy

Statistical analyses on RCT experimental data combining survey and eye tracking.

Sept 2024 - Dec 2024

- Experiment size: ~1200 participants, ~1M raw eye tracking observations.
- Current research Professors: Maria Cucciniello and Alessandro Romano (Law and Political Sciences Departments)
- Statistics: ANOVA, regularisation, GLM. Programming language: Python (pandas, statsmodels, scipy)

AI SOLUTIONS DEVELOPER – Obloo Ventures, Venture Capital and Private Equity (150M AUM)

Milan, Italy

Developed application that transcribes, summarizes and extracts key topics from audio files.

Jun - Sept 2024

- Boosted note-taking efficiency by 70% and 3x value extracted from meetings, as reported by analysts.
- Assisted in implementing and testing RAG architecture on a NAS system.

SELECTED PROJECTS

Credit Scoring Analysis

Description: led a study for Machine Learning course, comparing variations of ML algorithms for predicting credit card default, with a focus on dataset imbalance. Conducted research grounded in analysis of 10+ academic papers, exploring diverse algorithmic approaches.

Acquired skills: scikit-learn, research synthesis, data preparation, resampling, weighted models, feature engineering.

Playing ATARI with DON

Description: Currently coordinating a group of 3 (for Hephaestus AI Bocconi association) in replicating from scratch the architecture from *Mnih et al.*'s landmark paper, "Playing Atari with Deep Reinforcement Learning" (2013).

Acquired skills: PyTorch, RL theory, DQN architecture, gymnasium environment, leadership in research, professional writing.

IT SKILLS

- Python: proficient (libraries: Pandas, PyTorch, Spacy, NumPy, SciPy, Seaborn, Matplotlib, scikit-learn, statsmodels)
- R: intermediate (Bocconi University statistics course, 30/30, 2022/2023 and Econometrics course, 28/30, 2023/2024)
- **SQL**: intermediate (currently attending Bocconi course)
- **Git**: intermediate (professional experience)
- **Latex**: intermediate (academic experience)

LANGUAGES

Italian: Native English: Advanced French: Beginner Spanish: Beginner

(IELTS C1 band 8, 2024) (Bocconi course for B1)

UNIVERSITY ASSOCIATIONS

Hephaestus Applied AI – Research Project Head

• BSI Bocconi – Project Leader

Bocconi Students for Machine Learning - Research Member • AI & Neuroscience Student Association - Member

EXTRACURRICULARS

University certifications: Advanced Excel, Introduction to MATLAB, Quantum Physics educational seminar | **Italian Olympiad Semi-finalist** | Secured paid participation **to Hackathon Junction 2023** in Helsinki | **Drums player** for 6 years, played in public in several occasions, both solo and in group | AVIS **blood donator** | **Sports**: basketball player, MTB and road cycler, skier, snowboarder | **Interests**: Philosophy, History, Hiking.