Jacopo de Berardinis | CV

Creative, careful and minimalist I do believe in team work and I always try to give my personal contribution.

Education

Academic Qualifications

○ **MSc in Computer Science (Double Degree Programme)**
University of Camerino, Reykjavik University, Full marks and honour (cum laude)   *2014–2016*

Thesis Title: *SmartHub: an agent-based simulation framework for validating smart mobility solutions*
Thesis Supervisors: Prof. Andrea Polini, Prof. Francesco De Angelis, Prof. Marjan Sirjani

Paving the way to Smart Urban Planning, I co-designed and implemented a decision support system (DSS) for smart mobility validation. In short, SmartHub is an agent-based computational model, built upon MATSim, that allows experimenters to investigate the expected impact of introducing a collection of smart mobility services within an urban area of interest. This ambitious project required Machine Learning, Unsupervised Learning, Agent-Based Modelling and Software Engineering skills in order to reach our expectations.

○ **BSc in Computer Science**
University of Camerino, Full marks and honour (cum laude)   *2011–2014*

The main purpose of my thesis work was to analyse and compare the many different clustering algorithms which are typically used in Data Mining applications. This study aimed at showing the main aspects of each algorithm, comparing its performance, in terms of correctly classified instances, with the others.

○ **Diploma in Business Accounting and Programming**
ITCG "Umberto I" High School, 100/100   *2006–2011*

Notable Projects

○ **Masters Project:** *'jSeagull: a java Simulation Engine for Agent Graph Uderstanding in Local Lattices'*

I was part of a team developing an agent-based software application for predicting the spread of a piece of news over a Facebook-like social network. Unlike the related work in Social Network Analysis, we exploited the diversity of social network users in sharing behaviour and personal interests.

○ **Masters Project:** *'ICALL-IT: Intelligent Computer-Assisted Language Learning for the ITalian language'*

Inspired by some successful implementations, I contributed to the design and development of an ICALL system for the Italian language. Such system integrates insights from computational linguistics and artificial intelligence into computer-aided language learning, making it possible to analyze language automatically.

Experience

○ **University of Camerino**   **Camerino, IT**
Software Engineer   *September 2013–January 2014*

As part of the bachelor course, I attended an internship at the University of Camerino during which I was committed to design and develop a cluster analysis tool for algorithms classification performance comparison.

Technical and Personal skills

- **Programming Languages:** Proficient in: Java, Python, Pascal, Matlab.
  Also basic ability with: Arduino, R, C, C++, jCUDA.

- **Other Languages:** LaTeX, SQL, XML, UML, Alloy, OCL, BPMN.

- **Software Development:** Git, Agile methodologies and Scrum, jUnit.

- **General Business Skills:** Good presentation skills, Can elaborate structured reports.

Languages

- **Italian**: mother tongue.
- **English**: upper-intermediate independent user (B2).
- **French**: elementary knowledge (A2).

Interests and extra-curricular activity

- I am also a guitar player and a creative musician, with good knowledge in music production software, audio recording systems and virtual instruments. Moreover, I love hiking and trekking activities.