

Curriculum Vitae

PERSONAL INFORMATION

Luca Lovagnini

- Via Rossetti 24, La Spezia (SP), 1923, Italy
- +39 3471957122
- 🔀 lucalova91@gmail.com

Sex Male| Date of birth 24/07/1991 | Nationality Italy

STUDIES APPLIED FOR

Master's Degree Thesis in Computer Science

WORK EXPERIENCE

EDUCATION AND TRAINING

2013-2015 (In progress)

Master in Computer Science

University of Pisa, Italy. Actual average: 28.92 / 30

- Parallel Systems (to do)
- Distributed Systems and Enabling Technologies (33/30)
- Information Retrieval (to do)
- Natural Language Processing (33/30)
- Peer to Peer Systems (to do)
- Numerical Methods and Optimization (29/30)
- Database Management System (30/30)
- Algorithm 2 (30/30)
- Network and Cloud Security (to do)
- Compilers (29/30)
- Advanced Programming (30/30)
- Computational Models (24/30)

Distributed System and Cloud Project: the goal of this project was to implement a distributed File System in Java which guaranteed a strong consistency. This feature was achieved by the author through an implementation of the Raft Consensus Algorithm. Popular frameworks and libraries like Maven, Vagrant, Google's guava and Apache FTPServer were exploited for implementation and testing.

Advanced Programming Project: the project (which was developed in C#) assignment was to create a Simple Testing Framework where C# classes were generated and tested starting from xml files, and finally generating HTML tables. The goal was achieved exploiting the Visitor Pattern.

Peer to Peer Project: using the PeerSym simulator, the project goal was to implement a counting algorithm to estimate the network size.

Future Projects: implementation of a simplified version of the Free Net system, implementation of Map Reduce skeleton for Parallel Systems.

2010-2013 Bachelor of Computer Science

University of Pisa, Italy. Degree classification: 101/110



Curriculum Vitae

- Algorithms: Theory and Practice (27/30)
- Discrete Mathematics (21/30)
- Economy of Maritme Transport (30/30)
- Introduction to Computer Programming (27/30)
- Mathematical Analysis (19//30)
- Physics (30/30)
- Computer Architectures (27/30)
- Computer Programming 2 (25/30)
- Operating Systems and System Programming Practice (26/30)
- Operations Research (19/30)
- Probability Calculation and Statistics (27/30)
- Simulation (30/30)
- Software Engineering (19/30)
- Computability and Complexity (27/30)
- Computer Networks and Network Programming Practice (33/30)
- Databases (28/30)
- Logistics (25/30)
- Numerical Calculus (30/30)
- Web Programming (28/30)
- Wireless Networks (21/30)

Logistic Project: design and implement solution for solving a variant of the Minimum Spanning Tree problem. Operative Research techniques like Branch and Bound and Lagrangian Relaxation and the Subgriend Method were implemented.

Computer Networking Project. implement a (really) simplified version of Amazon's Dynamo system.

Simulation Project: simulate a Start Trek trading space station,

Operating System Project: implement a simplified version of a fat32 system.

Bachelor's Degree's thesis topic: Peer to Peer Streaming Systems, a review on the main aspects and systems which implements this technology.

2005-2010

A. Fossati, La Spezia, Italy. Diploma classification: 84/100

Information Technology High School

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

guage(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1

Communication skills

- Good listener, especially with senior developers and professors

- Excited to work with a team, but also when there is competition with other workers, developed also playing rugby and airsoft for a long time.
- Ambitious to reach always the top with respect to my possibilities and capacities
- Developed capacity on being focused and working under pressure, respecting deadlines and motivating others to reach common goals
- Good behavior in formal and informal situations



Organisational / managerial skills

- Eager to learn new paradigms, languages and technologies
- Skilled in Cloud and Distributed Systems
- Search engine and Information Retrieval lover
- Interested in design patterns
- Skilled in network programming
- Linux systems addicted
- Excellent skills in Object Oriented languages

Job-related skills

- Excellent knowledge of programming paradigms (Object Oriented, Imperative, Functional) and their main languages.
- Deep knowledge of frameworks and tools for Distributed Computing such as Hadoop, Vagrant and Ansible.
- Excellent knowledge of concurrent programming (especially in Java).
- Excellent knowledge of distributed consensus algorithms, such as Raft and Paxos, (and intent to improve knowledge about Byzantine fault tolerance solutions).
- Good programming skills for Parallel Systems and High Performance Computing, design parallel patterns and skeletons.
- Good knowledge of PeerSym for design and test Peer to Peer systems.
- Good knowledge of algorithms and data structure used for Search Engine, such as compression techniques, clustering, dictionary design, web crawling and page ranking.
- Great knowledge about Database Management and semi-structured data.
- Deep knowledge of Memory Management and System Architecture.
- Improving skills about design patterns.

Computer skills

Excellent programming skills in:

- Java
- C++
- C#
- C
- SQL

Good programming skills in:

- Ocaml
- HTML
- CSS
- XML
- XQuery
- YAML
- PHP
- Owl

Light knowledge of Python, Ruby, JSON, JQuery

Other skills Photographer as hobby, in particular in time lapse, nature, street and sport photography.

Driving licence B

ADDITIONAL INFORMATION

ANNEXES



Curriculum Vitae