Lorenzo Stella

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Professional Experience

2013–now	PhD student at IMT Institute for Advanced Studies Lucca (http://www.imtlucca.it), Lucca (Italy).
2011–2012	Research Analyst at COSBI (http://www.cosbi.eu), Trento (Italy). Analysis and simulation of stochastic models in systems biology (PK/PD, metabolic networks); inference and analysis of gene regulatory networks; development of tools for stochastic simulation and network analysis in C#, Python and MATLAB languages.
2011–2011	Software Developer at WorkHard (http://www.workhard.ph), Florence (Italy). Multimedia software development using ActionScript3 language for the Flash/AIR platform; interaction with RFID devices; experiments with C# and the Microsoft Kinect SDK.

Education

2008–2011	MSc in Computer Science, University of Florence, 110/110 cum laude. Thesis supervised by Prof. Luigi Brugnano:

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EFFICIENT METHODS FOR THE NUMERICAL SOLUTION OF HAMILTONIAN PROBLEMS

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Analysis of the effectiveness of numerical methods for differential equations with respect to the preservation of qualitative properties of the simulated system, with particular attention to energy conservation in the case of Hamiltonian systems and to the efficient implementation of such techniques, using a framework developed *ad hoc* with the C language.

2004–2008	BSc in Computer Science, University of Florence, 110/110. Thesis supervised by Prof. Luigi Brugnano:

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NUMERICAL METHODS IN LINEAR ALGEBRA WITH APPLICATIONS TO GOOGLE'S PAGERANK

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Study of the *random surfer* model and possible approaches to the calculation of the stationary point of the Markov chain associated with it, with the aim of combining modeling and mathematical aspects of the problem with those of its efficient resolution on a computer. The approaches and algorithms presented were compared on the basis of experimental results obtained with MATLAB implementations.

Scientific and technical skills

Mathematics	Algebra, Linear Algebra, Calculus, Numerical Analysis, Probability, Geometry, Dynamical Systems, Mathematical Logic.
Computer Science	Algorithms, Data Structures, Theoretical Computer Science and Computational Complexity, Databases.
Programming	Excellent knowledge of C, Python, MATLAB, Java. Good skills in C++, C#, Scheme. Familiar with Haskell, Perl, Fortran.
Operating systems	GNU/Linux. Good knowledge of Mac OS X, MS Windows.
Other tools	LaTeX, MySQL database management system.

Languages

Italian	Native
English	Fluent