Lorenzo Stella

Born in Nationality

December 12, 1985 Florence, Italy Italian, American Email Web GitHub lorenzostella@gmail.com lostella.github.io github.com/lostella

Professional Experience

Feb 2013 - now

PhD student at IMT School for Advanced Studies, Lucca (Italy) www.imtlucca.it and KU Leuven, Leuven (Belgium). www.esat.kuleuven.be/stadius

Nonsmooth optimization algorithms, applications to optimal control, distributed optimization, large-scale machine learning, image processing. Teaching assistant, exercises and laboratory sessions for the "Optimization" class, taught by Panos Patrinos, at KU Leuven.

Leuver

2011 - 2012

Research Analyst at COSBI, Trento (Italy).

www.cosbi.eu

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.

Education

2008 - 2011

M.S. cum laude in Computer Science, University of Florence, Florence (Italy).

Thesis supervised by Prof. Luigi Brugnano, Efficient methods for the numerical solution of Hamiltonian problems. Analysis of the effectiveness of numerical methods for ODEs with respect to the conservation of energy in the case of Hamiltonian systems. Efficient implementation of such techniques using a framework developed in C.

2004 - 2008

B.S. in Computer Science, University of Florence, Florence (Italy).

Thesis supervised by Prof. Luigi Brugnano, Numerical methods in Linear Algebra with applications to Google's Pagerank. Study of the random surfer model and possible approaches to the computation of the stationary point of the associated Markov chain. Experimental results obtained with MATLAB simulations.

Software projects

GitHub: github.com/lostella

Proximal Operators.jl JULIA package to compute the proximal operator of several functions commonly used in nonsmooth optimization problems. Useful as building block to implement large scale optimization algorithms such as ADMM.

Web page: github.com/kul-forbes/ProximalOperators.jl

ForBES

MATLAB solver for nonsmooth optimization, contains a library of mathematical functions to formulate problems arising in control, machine learning, image and signal processing.

Web page: kul-forbes.github.io/ForBES

Programming skills

Proficient | C, MATLAB, JAVA, JULIA, PYTHON, GIT

Familiar | C++, C#, HASKELL, SQL

Languages

English | Native

Italian Native

German | Elementary