Luigi Marangio

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ResearchGate
Bitbucket

Summary

I'm a mathematician based in Pisa, currently searching for new research opportunities in the industry. Are you looking for a **strong theoretical background, proficiency in various programming languages, excellent communication skills? Here I am**.

During my two Ph.D., I produce high-quality research at the crossroad of mathematics and computer science, applying theoretical concept to real-world problems with hands-on experience in making algorithms (including machine learning pipelines). Strong communication skills forged through numerous teaching experiences (French/English/Italian), participation in international congresses and conferences, work experience abroad.

When I'm not doing math: international volunteering, travel addicted, trading, avid reader, amateur grower, meditation, juggling, +10 years vegetarian.

Strengths: **strong mathematical background**, **programming proficiency**, **4 languages speaker**, **worked in almost any area of science**.

Best achievement: my first author article https://link.springer.com/article/10.1007/s10955-019-02421-1, has been cited in the 2021 **Physics Nobel prize** literature

Work Experience

Jul 2021–Oct 2021 (4 months)

Researcher at **Math department**, Pisa University, Italy

data-driven methods | fourier-analysis | julia

Worked in the international dynamical system team, developing a Fourier-based method for rigorous computations of statistical properties of random dynamical systems.

May 2020–May 2023 (3 years)

Honorary Fellow in Mathematical Analysis at **Math department**, Pisa University, Italy

analysis | teaching | administration

Worked in the mathematics department in Pisa, supporting the exams activities and providing administrative help

Sep 2017–Apr 2021 (3 years, 6 month)

Ph.D at **Pisa University**, Mathematics department, Italy

ergodic theory | functional analysis | data science

Worked in the mathematics department in Pisa, successfully developing the math part related of my thesis project.

Thesis title: Rigorous computational methods for understanding the statistical behavior of random dynamical systems.

Thesis will be open to public in 2 years, 8 month. Here https://link.springer.com/article/10.1007/s10955-019-02421-1, a nice overview to a part of my Ph.D work.

Sep 2017–Avr 2021 (3 years, 6 month)

Ph.D at **Bourgogne Franche-Comté University**, Computer Science and Complex Systems department, France

Julia Python C++ data science

Worked in the computer science department in Belfort, successfully developing the scripts and algorithms necessary to my thesis project; participated at various cryptography projects related to pseudo random number generators.

Checkout our scripts at

https://github.com/orkolorko/NoiseFourier.jl

https://bitbucket.org/luigimarangio/

Mar 2020– Jan 2021 (9 month)

Assistant Teacher at **Mathematics, Calculus 1**, Pisa University, Italy

Calculus

Oct 2020–Mar 2021 (6 month)

Visiting Researcher at **Mathematics**, Universidade Federal do Rio de Janeiro, Brazil

Fourier-Analysis Julia Portuguese

Jan 2019–Jun 2019 (6 month)

Teacher at **Computer Science, Numerical Analysis**, IUT-BM Informatique, Université Bourgogne Franche-Comté, France

Numerical Analysis Julia

Jan 2019–Avr 2010 (4 month)

Assistant Teacher at **Computer Science, Object-based programmation**, IUT-BM Informatique, Université Bourgogne Franche-Comté, France

Java

Programming Proficiency

Languages:	Julia (proficient), Python (familiar), Octave/Matlab (familiar), C# (beginner), SQL (learning), R (learning), Tableau (learning), Java (learning)
Libraries:	ArbNumerics.jl (proficient), Interval Arithmetics.jl (proficient), Scikit-learn (proficient), Gensim (proficient)
Misc:	Category Theory, abstract algebra

Languages

Languages:	Italian (mothertongue, English (proficient) , Brazilian Portuguese (familiar), French (familiar)

On going work

Courses:	Google Data Analytics Professional Certificate — Coursera Dutch — Duolingo
Article in progress:	[L. Marangio, I. Nisoli, S. Galatolo] A posteriori validated numerical method for the computation of stationary measures based on Fourier approximation
Julia package in progress:	[I. Nisoli, L.Marangio] NoiseFourier.jl