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Born 04.10.1989
French
Single
Driving license in 2007

Research experience

2013–Now	**PhD under the supervision of G. Peyré and C. Monier** *Applied Mathematics and Neurosciences. Dynamic textures synthesis for visual stimulation. Psychophysical study of speed perception. Extracellular and optical (VSDi) recording for the study of the cat visual cortex : experimental involvement and data analysis using machine learning tools.* Dauphine University (PSL), Paris. Unité Neuroscience, Information et Complexité (UNIC-CNRS), Gif-sur-Yvette.
2011–2012	**Research internship under the supervision of J-M. Morel and B. Coll.** *Texture synthesis : the Portilla-Simoncelli algorithm (statistical tools, optimization, C implementation).* Universitat de les Illes Balears, Mallorca. Centre de Mathématiques et de Leurs Applications (CMLA), Cachan.

List of contributions

2016	**Bayesian Modeling of Motion Perception using Dynamical Stochastic Textures** *Arxiv, PREPRINT.*
2015	**Biologically Inspired Dynamic Textures For Probing Motion Perception** *Conf. Neural Information Processing System (NIPS).* Link
2015	**Linear Filtering : from the Continuous Spectral Definition to the Numerical Computations** *PREPRINT (accepted). Journal. Image Processing Online (IPOL). Implementation of the Steerable Pyramid (Link). Detailed algorithm, online demo, open source code in C.* Link
2013	**The Heeger-Bergen Pyramid Based Texture Synthesis Algorithm** *Journal. Image Processing Online (IPOL). Detailed algorithm, online demo, open source code in C.* Link

Education

July 2013	**Highest mathematics competitive exam for academic teaching** *Agregation de Mathématiques.*
2010–2013	**Master's degree in mathematics** *Mathematics, Vision and Learning. Graduated with honours.* École Normale Supérieure de Cachan.
2007–2010	**Classe Préparatoire aux Grandes Écoles (CPGE).** *Three years intensive undergraduate program - training for highly selective competitive exams to enter French engineering schools, specialized in Mathematics* Pierre De Fermat highschool, Toulouse.

Teaching Activities

2013–2015	**Analysis, Linear Algebra, Differential Calculus.** *Three hours a week. Mid to high level students.* Dauphine University, Paris.
2011–2013	**Examiner in mathematics.** *Oral exam training. Two hours a week. High level students.* CPGE, Janson de Sailly highschool, Paris.

Awards and Scholarships

2012–2013	**Excelence Master's Scholarship** *Funding (10 000 euros) from the Fondation de Mathématiques Jacques Hadamard (FMJH)* Link

Languages

French : native / English : fluent / Spanish : basic

Computer Science

Operating systems : Linux, Windows
Languages : Python (parallel/GPU computing), Matlab, basic knowledge in C/C++

Interests and other activities

Sports : handball, hiking, tennis, . . .
Video/Board Games : hearthstone, megawatt, smallworld, 7 wonders, . . .
Music, cinema, sciences, social sciences, economy, politics, . . .
President of the association "Les sENS de l'Art" in 2012 : in charge of the organization of the annual art and music festival of ENS Cachan (budget : 40 000 euros).