De Bortoli Valentin
Curriculum Vitae

PERSONAL DETAILS

Birth	October 13, 1993
Address	52 Rue Gustave Courbet, Bagneux
Phone	(+33) 666362317
Mail	`valentin.debortoli@cmla.ens-cachan.fr`

EDUCATION

Msc, Mathématiques Vision et Apprentissage   `2016-2017`
ENS Paris Saclay, Cachan

> Obtained with highest honors. Advanced techniques and foundations in image processing (a contrario methods, inverse problems, stochastic modeling) and machine learning (neural networks, convex optimization, probabilistic graphical models).

Agrégation externe   `2015-2016`
ENS Paris Saclay, Cachan

> 19th/300. Civil service competitive examination for the public education system. Group theory, field theory, linear and bilinear algebra, projective geometry, functional and complex analysis, topology, differential calculus.

First year graduate study   `2014-2015`
ENS Paris Saclay, Cachan

> Obtained with highest honors. Partial differential equations, complex analysis, differential geometry, machine learning.

Bsc, Mathématiques Fondamentales   `2013-2014`
ENS Paris Saclay, Cachan

> Obtained with highest honors. Fundamental statistics, probability and measure theory, advanced algebra, differential calculus and functional analysis.

Higher School Preparatory Classes   `2011-2013`
Lycée aux Lazaristes, Lyon

> Intensive two-years university foundation course preparing for the competitive entrance examinations to the Ecole Normale Superieure. Undergraduate mathematics, physics, chemistry and computer science.

Baccalauréat   `2011`
Lycée Saint Ambroise, Chambéry

> French equivalent of the A levels. Speciality in mathematics.

WORK EXPERIENCE

Phd student   `2017-present`
Centre de Mathématiques et de Leurs Applications (CMLA), Cachan

> Advisors: Agnès Desolneux, Bruno Galerne, Arthur Leclaire. Image processing and probability thesis: stochastic modelling and spatial redundancy.

Teaching Assistant   `2017-present`

ENS Paris Saclay

> Differential calculus Teaching Assistant (undergraduate level), reference: Frédéric Pascal. Optimization Teaching Assistant (graduate level), reference: Alain Trouvé. Hilbertian analysis Teaching Assistant (agrégation), reference: Frédéric Pascal.

Intern   `2017`

CMLA

> Five months internship under the supervision of Agnès Desolneux, Bruno Galerne and Arthur Leclaire. Study of a contrario models to describe patch similarity in textured images (image processing).

Higher School Preparatory Classes examiner   `2016-2017`

Lycée Janson de Sailly, lycée Lakanal

> Mathematics examiner for first year students in higher school preparatory classes examiner. References: Carine Apparicio (Janson de Sailly), Patrick Rauch (Lakanal).

Intern   `2015`

San Diego State University

> Five months internship under the supervision of Jérôme Gilles. Mathematical study and implementation of a texture segmentation algorithm based on empirical wavelets (image processing).

Intern   `2014`

CMLA

> Four months internship under the supervision of Agnès Desolneux and Lara Raad. Implementation and study of the FRAME model (image processing).

SKILLS

Languages	French (mothertongue)
	English (advanced) (627/677 TOEFL exam)
	Italian (basic)
Software	MATLAB, LaTeX, PYTHON, EMACS
O.S	Linux, Windows

REFERENCES

Available upon request