

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

Name	CAVICCHIOLI ROBERTO
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Nationality	Italy
Date of birth	14/01/1986

TEACHING EXPERIENCE

Fall 2013 : Tutor for the course of Parallel Computing at the Università di Modena e Reggio Emilia, Italy.

Fall 2012 : Tutor for the course of Parallel Computing at the Università di Modena e Reggio Emilia, Italy.

01/11/2009 – 15/05/2010 : Tutor for the course of Mathematical Analysis at the Università di Modena e Reggio Emilia, Italy.

WORKING EXPERIENCE

6 years of technical support for Computer school labs at
"Istituto Comprensivo G.Leopardi", Castelnuovo Rangone (MO),
"Istituto Comprensivo Savignano", Savignano sul Panaro (MO),
"Istituto Comprensivo G.Carducci", Modena;

6 years of technical support and advisor for law firm "Pellegrini Vicenzi".

EDUCATION AND TRAINING

From 01/01/2011: PhD Student at "Multiscale Modelling, Computational Simulations and Characterization in Material and Life Sciences" School of Graduate Studies in Modena

22/09/2010 Graduated (cum laude) in Laurea Magistrale in Informatica, curriculum "Informatica per le Scienze", Università di Modena e Reggio Emilia, Italy

8/10/2008: Graduated (cum laude) in Informatica, Università di Modena e Reggio Emilia, Italy

2005: Diploma with top marks and qualified as "Perito Capotecnico Informatico", ITIS "F.Corni", Modena, Italy

PUBLICATIONS

- Federico M., Valente P., Leoncini M., Montangelo M., Cavicchioli R.
"An efficient algorithm for planted structured motif extraction", Proceedings of the 1st ACM workshop on Breaking frontiers of computational biology, ACM publ (2009), ISBN:978-1-60558-556-7, Order Number:104090 , 1-6
- Zanella R., Cavicchioli R., Zanni L., Zanghirati G., "Constrained optimization methods for image reconstruction on multicore systems", 15th AustrianFrench-German Conference on Optimization, Toulouse (France), September 19-23, 2011
- Zanella R., Cavicchioli R., Zanni L., Zanghirati G., "Metodi di ottimizzazione vincolata per la ricostruzione di immagini su sistemi multicore", "XIX Congress UMI", Bologna (Italy), September 12-17, 2011.
- Cavicchioli R., Prearo A., Zanella R., Zanghirati G., Zanni L., "Optimization methods for digital image restoration on MPP multicore architectures", in Advances in Nonlinear Optimization and Equilibrium Problems: a Tribute to Marco D'Apuzzo (V. De Simone, D. Di Serafino, G. Toraldo eds.), Quaderni di Matematica, Dip. di Matematica della Seconda Università di Napoli, Aracne, vol. 27 (2012), 93-116.
- Prato M., Cavicchioli R., Zanni L., Boccacci P. and Bertero M. 2012, "Efficient deconvolution methods for astronomical imaging: algorithms and IDL-GPU codes", Astronomy & Astrophysics 539, A133.
- Cavicchioli R., Chaux C., Blanc-Féraud L., Zanni L., "ML Estimation Of Wavelet Regularization Hyperparameters In Inverse Problems", Proceeding Of 38th International Conference On Acoustics, Speech, And Signal Processing (ICASSP), Vancouver (Canada) May 26 – 31, 2013
- Zanella R, Zanghirati G, Cavicchioli R, Zanni L, Boccacci P, Bertero M And Vicidomini G.
"Towards Real-time Image Deconvolution: Application To Confocal And STED Microscopy"
Sci. Rep. 3 (2013); Doi: 10.1038/srep02523

TALKS IN MEETING / WORKSHOP

- "ISIS meeting: Résolution de problèmes inverses : optimisation et parallélisation", Paris (France), June 29 2012. Title: "Accelerating gradient methods for hyperparameter estimation in image reconstruction"
- Poster: Cavicchioli R., Prato M., Zanni L., Boccacci P., Bertero M., "Efficient multi-image deconvolution in astronomy", OIP 2012, Modena (Italy), September 20-21, 2012
- Poster: Cavicchioli R., Chaux C., Blanc-Féraud L., Zanni L., "ML estimation of wavelet regularization hyperparameters in inverse problems", proceeding of 38th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Vancouver (Canada) May 26 – 31, 2013

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

ENGLISH

- Reading skills Excellent
- Writing skills Good
- Verbal skills Good

	FRENCH
• Reading skills	Good
• Writing skills	Basic
• Verbal skills	Good

TECHNICAL SKILLS AND COMPETENCES

Programming languages:

C, C++, Pascal, Fortran, Java, Matlab, R, CUDA-C

Operative System used:

Windows 3.1 – 7, Linux, MacOS

Attended Workshops:

20th Summer School of Parallel Computing, CINECA,
4-15 July 2011.

7th Advanced School of Parallel Computing, CINECA,
10-14 October 2011.

PRACE Summer School - Enabling Applications on Intel MIC based
Parallel Architectures - Bologna, Italy, 8-11 July 2013

DRIVING LICENCE

Italian B driving license