

### Personal informations

Date of Birth:	10/07/1980 (mm/dd/yy)
Gender:	Male
Citizenship:	Italian
Civil status:	Single
Children:	none

### Contact informations

Via Flaminia n. 413	Italian Mobile: +39 329 2765018
60015 - Falconara M.ma (AN) - Italy	<a href="http://www.eziobartocci.com">http://www.eziobartocci.com</a>
Email: <a href="mailto:ezio.bartocci@unicam.it">ezio.bartocci@unicam.it</a>	Home Phone: +39 071 914115
Skype: eziobartocci	

### Employment

1. PostDoc in Computer Science (from April 2009), University of Camerino  
Project: *BEAT: Behavior modeling, Efficient Analysis Techniques and regulation strategies for excitable cells using hybrid automata.*
2. Collaboration Contract in the LITBIO project, University of Camerino (MC) - Italy,  
Feb 2005/Apr 2005 (2 months)
3. PhD in Computer Science (January 2007 - January 2009), University of Camerino  
Project: *LITBIO: Laboratory for Interdisciplinary Technologies in Bioinformatics.*
4. Collaboration Contract in the Oncology Over Internet (O2I) project Camerino (MC) - Italy,  
Ott 2005/Dic 2005 (2 months)
5. Fellowship in the Oncology Over Internet (O2I) project Camerino (MC) - Italy,  
Giu 2003/Feb 2004 (10 months)
6. Fellowship in the Proteum-Zentrum of Rostock University Rostock - Germany,  
Nov 2002/Feb 2003 (4 months)

### Education

1. PhD in Information Science and Complex Systems (January 2009), University of Camerino  
Thesis: *A Formal Framework for Modeling, Simulating and Analyzing Networks of Excitable Cells*  
Advisor: Prof. Flavio Corradini  
Co-Advisors: Prof. Scott A. Smolka, Prof. Radu Grosu
2. Master Degree in Bioinformatics (14/04/2005),  
University of Camerino - Marks: 110/110 with honors.  
Thesis: *Sistema multiagente per la predizione, basata su ortologia, dell'interazione tra proteine.*  
Advisor: Prof. Emanuela Merelli  
Co-Advisor: Prof. Mauro Angeletti
3. Bachelor Degree in Computer Science (18/09/2002),  
University of Camerino - Marks: 110/110 with honors.

Thesis: *AIXO: Un wrapper generalizzato XML*.

Advisor: Prof. Emanuela Merelli

Co-Advisor: Dott. Leonardo Mariani

4. High School Degree (Jul 1999),  
Liceo Scientifico di Falconara M.ma - Marks: 94/100

## Languages

English (PET Certificate) and Italian

## Research interests

Formal methods for in-silico biology, spatial properties analysis, chaos and fractals, image analysis, pattern matching, machine learning, computational models in systems biology, bioinformatics, simulation, model checking, workflow management systems, agent-based technology.

## Programming languages and skills

I have more than 6 years of experience in programming in C, C++ (skills with OpenMP and OpenGL library), Java, PHP, Matlab and 3 years in teaching Object Oriented programming. Skills in developing database in MySQL, Ontologies, Web Services and Wroklflows. Knowledge of the bioinformatics tools(Blast, Fasta, ClustalW, Treecon, Ensembl, DAS, GenomeBrowser, BioJava, Taverna).

## Developed tools (some of them in collaboration with others)

1. HermesV2 (Middleware agent-based, component-based written in Java),  
<http://sourceforge.net/projects/hermes-project>
2. PhpBibliography - web based bibliography system,  
<http://phpbibliography.sourceforge.net/>
3. BioWMS - a web-based Workflow Management System for bioinformatics -  
<http://litbio.cs.unicam.it/index.php>
4. CellExcite - an efficient simulation environment for excitable cells  
<http://www.cs.sunysb.edu/~eha/results.htm>
5. Emerald - a tool for learning and detecting emergent behavior in networks of cardiac myocytes <http://www.cs.sunysb.edu/~eha/results.htm>
6. ExpressionView - a tool for visualization of quantitative trait loci and gene-expression data in Ensembl.

## Schools and Courses

1. 7th INTERNATIONAL SCHOOL ON FORMAL METHODS FOR THE DESIGN OF COMPUTER, COMMUNICATION AND SOFTWARE SYSTEMS: PERFORMANCE EVALUATION (SFM-07:PE) Bertinoro Univ. Residential Center - Italy, 28 May - 2 June 2007
2. Biomed Grid Summer School 2007 Villa Monastero, Via Polvani 2, Varenna, Italy 14-19/05/2007
3. First International Summer School on Emerging Trends in Concurrency TiC'06 University of Bologna Residential Center Bertinoro, Italy 24-29/07/2006

4. PhD course on probabilistic model checking University of Florence, Italy 7-9/06/2006
5. XV International School for Computer Science Researcher "Algorithmics for Data Mining and Pattern Discovery" Lipari (ME), Italia. 13-26/07/2003

### **Grant and Awards**

1. PostDoc grant (University of Camerino - LITBIO project) 2009
2. ASSINT scholarship (University of Camerino) 2008
3. ASSICOS scholarship (University of Camerino) 2007
4. ASSICOS scholarship (University of Camerino) 2006
5. PhD scholarship (University of Camerino - LITBIO Project) 2007-2009
6. Fellowship in the Oncology Over Internet (O2I) project 2003-2004
7. UNICAM Merit scholarship 2003
8. UNICAM Merit scholarship 2001

### **Membership and affiliation**

1. Member of the COmplex SYstems Research Group (CoSy)
2. Member of Bionformatics ITALian Society (BITS)
3. Member of SysBioHealth Society (SBH)
4. Member of the FBTC 2008 program committee

### **Leaderships in the Student Union**

1. Representative of PhD students in the School of Advanced Studies of Camerino University 2006/2008
2. Representative of BS and MSD Students in the council of the Faculty of Technology and Science of Camerino University 2002/2005

### **Teaching**

1. Professor on Distributed Calculus and Coordination (Project DCC), Master Degree in Computer Science (14 hours), AA 2009/2010, University of Camerino
2. Professor on Contract in Lab. of Algorithms and Data Structures, Bachelor Degree in Computer Science (48 hours), AA 2009/2010, University of Camerino
3. Professor on Contract in Lab. of Algorithms and Data Structures, Bachelor Degree in Computer Science, AA 2008/2009, University of Camerino
4. Professor on Contract in Lab. of Algorithms and Data Structures, Bachelor Degree in Computer Science, AA 2007/2008, University of Camerino
5. Professor on Contract in Lab. of Algorithms and Data Structures, Bachelor Degree in Computer Science, AA 2006/2007, University of Camerino
6. Professor on Contract in Introduction to Computer Science, Bachelor Degree in Biotechnology (Course in English), AA 2005/2006, University of Camerino

---

**Journal Papers**

1. R. Grosu, S. A. Smolka, F. Corradini, E. Entcheva, A. Wasilewska and E. Bartocci, *Learning and Detecting Emergent Behavior in Networks of Cardiac Myocytes*, In "Research Highlights" of Communication of ACM, 2009 52(3): 97-105. - I.F. 2.646
2. E. Bartocci, F. Corradini, M. R. Di Berardini, E. Entcheva, R. Grosu, S. A. Smolka, *Modeling and Simulation a Cardiac Tissue using Hybrid I/O Automata*, Theoretical Computer Science, 2009 410(33-34):3149-3165. - I.F. 0.806
3. E. Bartocci, F. Corradini, E. Entcheva, R. Grosu, S. A. Smolka *CellExcite: an efficient simulation environment for excitable cells*, BMC Bioinformatics 2008 9(Suppl 2):S3 - I.F. 3.781
4. E. Bartocci, F. Corradini, E. Merelli, L. Scortichini *BioWMS: a web based Workflow Management System for Bioinformatics*, BMC Bioinformatics 2007 8(Suppl 1):S2 - I.F. 3.781
5. P. Romano, E. Bartocci, E. Merelli, G. Bertolini, F. De Paoli, D. Marra, G. Mauri, E. Merelli, L. Milanese *Biowep: a workflow enactment portal for bioinformatics applications*, BMC Bioinformatics 2007 8(Suppl 1):S19 - I.F. 3.781
6. E. Bartocci, D. Cacciagrano, N. Cannata, F. Corradini, E. Merelli, L. Milanese, P. Romano *An Agent-based Multilayer Architecture for Bioinformatics Grids*, IEEE Transactions on Nanobioscience 2007 6(2):142-148 - I.F. 1.341
7. G. Fischer, S. M. Ibrahim, G. A. Brockmann, J. Pahnke, E. Bartocci, Hans-Jürgen Thiesen, P. Serrano-Fernández, S. Möller *Expressionview: visualization of quantitative trait loci and gene-expression data in Ensembl*, Genome Biology 2003 4(2):R77 - I.F. 6.15

**Invited Papers**

1. E. Bartocci, F. Corradini, E. Merelli, R. Grosu, O. Riganelli, S. A. Smolka *StonyCam: a Formal Framework for Modeling, Analyzing and Regulating Cardiac Myocytes*, Concurrency, Graphs and Models 2008, Lecture Notes in Computer Science vol. 5065, pp. 493-502, Springer-Verlag

**Refereed Conference Papers**

1. E. Bartocci, F. Corradini, M. R. Di Berardini, E. Merelli, L. Tesei, *A Shape Calculus for Biological Processes*, In the proceedings of the 11th Italian Conference on Theoretical Computer Science (ICTCS 09), Cremona, Italy, September, 2009, To Appear
2. R. Grosu, E. Bartocci, F. Corradini, E. Entcheva, S. A. Smolka, A. Wasilewska, *Learning and Detecting Emergent Behavior in Networks of Cardiac Myocytes*, In the proceedings of the 11th International Conference on Hybrid Systems: Computation and Control (HSCC'08), St. Louis, USA, April, 2008, Lecture Notes in Computer Science vol. 4981, pp. 229-243, Springer-Verlag
3. E. Bartocci, E. Merelli, L. Mariani: *An XML View of the "World"*, ICEIS (1) 2003: 19-27, Angers - France.

**Refereed Workshop Papers**

1. E. Bartocci, F. Corradini, E. Merelli, L. Tesei, *Model Checking Biological Oscillators*, In the proceedings of the 2th From Biology To Concurrency International Workshop (FBTC'08), Reykjavik, Island, July, 2008, Electronic Notes in Theoretical Computer Science (To appear), Elsevier
2. E. Bartocci, F. Corradini, M. R. Di Berardini, E. Entcheva, R. Grosu, S. A. Smolka, *Spatial Networks of Hybrid I/O Automata for Modeling Excitable Tissue*, In the proceedings of FBTC'07 From Biology to Concurrency and Back International Workshop co-sited with CONCUR conference, Electronic Notes in Theoretical Computer Science vol. 194(3), pp. 86-102, Elsevier
3. E. Bartocci, F. Corradini, E. Merelli, L. Vito *Model driven design and implementation of activity-based applications in Hermes*, Workshop From Objects to Agents - WOA 2006 - Demo Session, September 26-27, 2006, Catania Italy
4. E. Bartocci, F. Corradini, E. Merelli *Building a Multiagent System from a User Workflow Specification*, Workshop From Objects to Agents - WOA 2006 - Demo Session, September 26-27, 2006, Catania Italy
5. E. Bartocci, D. Cacciagrano, N. Cannata, F. Corradini, E. Merelli, L. Milanesi, P. Romano *A GRID-based multilayer architecture for bioinformatics*, In the proceedings of NETTAB'06 Network Tools and Applications in Biology, 2006 - Santa Margherita di Pula, Cagliari, Italy
6. E. Bartocci, F. Corradini, E. Merelli, *Enacting proactive workflows engine in e-Science*, In Proceedings of the 1st International Workshop on Workflow Systems in e-Science (WSES 06) ICCS 2006, Part III, LNCS 3993 -1012, Springer-Verlag