

# Livio Bioglio

---

- CONTACT INFORMATION**      Università degli studi di Torino, dipartimento di Informatica  
Corso Svizzera 185      *E-mail:* biogliol@di.unito.it  
10149 Torino (TO), Italy      *WWW:* <http://www.di.unito.it/~biogliol>
- RESEARCH INTERESTS**      Type Theory, Semantics and Logics of Computation, Proof Assistants, System Biology, Bioinformatic
- EDUCATION**
- Università degli studi di Torino**      January 2010 - present  
Candidate for Ph.D. in Scienza ed Alta Tecnologia – Computer Science
- *Research adviser:* Professor Mariangiola Dezani
- Università degli studi di Torino**      December 2006 – July 2009  
Master of Science in Metodologie e Sistemi informatici
- *Thesis Title:* Types for Biological Systems
  - *Research adviser:* Mariangiola Dezani
  - *Vote:* 110/110 cum laude and "dignità di stampa"
- Università degli studi di Torino**      October 2003 – December 2006  
Bachelor of Science in Informatica (Computer Science)
- *Thesis Title:* Development of a prototype for the analysis of typing rhythms on computer keyboard
  - *Research adviser:* Daniele Gunetti
  - *Vote:* 110/110 cum laude
- Relevant Courses:* Algorithms, Analysis, Artificial Intelligence, Coding Theory, Computation Structures, Computational Complexity, Cryptography, Databases, Formal Systems, Graph Theory, Markovian Stochastic Systems, Modelling, Networks and Computer Security, Probability, Programming (Java, C, PHP, JSP), Semantic, Theory of Computation, Type Theory.
- SCHOOLS**
- JAIST – Formal Reasoning: Theory and Application**      Kanazawa  
<http://www.jaist.ac.jp/~hirokaawa/jss12.html>      5-9 March 2012
- The school provided lecture courses and tutorials on *Logics, Semantics and Proof Analysis*
- Mathematical Modeling of Complex Systems**      Patras  
<http://www.math.upatras.gr/~phdsch11/>      18-29 July 2011
- The school offered 4 lecture courses taught by experts in each field: *Mathematical Foundations of Complexity, Physics of Complex Systems, Complexity in Biology and Neuronal Dynamics, Complex Systems in Economics and Sociology*
- Bertinoro International Spring School (BISS)**      Bertinoro (Forli-Cesena)  
<http://www.bici.eu/biss2010/>      1-12 March 2010
- The school offered 4 courses each consisting of 15 hours of lectures: *An Introduction to Bisimulation and Coinduction* by Davide Sangiorgi, *Learning Theory: Statistical and Game-Theoretic Foundations* by Nicolò Cesa-Bianchi, *Advanced Algorithms for Massive Data Sets* by Paolo Ferragina, *Foundations of Advanced Networking* by Francesco Lo Presti

JOURNAL  
PUBLICATIONS

Bioglio L., “Enumerated Type Semantics for the Calculus of Looping Sequences” in *RAIRO - Theoretical Informatics and Applications*, vol. 45, iss. 01, pp. 35 -58, 2011.

Bioglio L., Dezani-Ciancaglini M., Giannini P. and Troina A., “Type Directed Semantics for the Calculus of Looping Sequences” in *International Journal of Software and Informatics (IJSI)*, to appear.

Bioglio L., Dezani-Ciancaglini M., Giannini P. and Troina A., “Typed Stochastic Semantics for the Calculus of Looping Sequences” in *Theoretical Computer Science*, to appear.

CONFERENCE  
PAPERS

Bioglio L., “Typed Reductions of CLS”, *Italian Conference on Theoretical Computer Science (ITCTS) 2009*, September 28-30, 2009, Cremona (Italy)

Bioglio L., Dezani-Ciancaglini M., Giannini P. and Troina A., “A Calculus of Looping Sequences with Local Rules”, *7th Workshop on Developments in Computational Models (DCM) 2011*, to appear.

Bioglio L., Calcagno C., Coppo M., Damiani F., Sciacca E., Spinella S., and Troina A., “A Spatial Calculus of Wrapped Compartments” *5th Workshop on Membrane Computing and Biologically Inspired Process Calculi (MeCBIC) 2011*, to appear.

Bioglio L. “A Minimal OO Calculus for Modelling Biological Systems” *Computational Models for Cell Processes (CompMod) 2011*.

RESEARCH  
EXPERIENCE

**National Institute of Informatics** (Tokyo) January - May 2012  
*Internship* under the NII International Internship Program

- Researched on lambda calculus by means of proof assistant tools
- Under supervision of Professor Makoto Tatsuta

**Stevens Institute of Technology** (Hoboken) November - December 2011  
*Internship* at Computer Science Department

- Researched on biological models
- Under supervision of Professor Adriana Compagnoni

**Università degli studi di Torino** July - December 2009  
*Scholarship* in project ”Developing white and green biotechnologies by converging platforms from biology and information technology towards metagenomics”, funded by Regione Piemonte

- Researched on modeling biological properties via Type Systems
- Under supervision of Professor Mariangiola Dezani

TEACHING  
EXPERIENCE

- Laboratorio Alfabetizzazione Informatica**      Università degli studi di Torino  
*Teaching Assistant*      March 2011 – October 2012
- Taught basic Computer literacy to undergraduate students. Designed course material, problem sets, and exam questions.
  - Class led by Professor Luca Console
- Programmazione II**      Università degli studi di Torino  
*Teaching Assistant*      October 2007 – October 2008
- Taught Java and advanced programming to undergraduate students.
  - Class led by Professor Luca Paolini and Professor Claudia Picardi
- Sistemi Operativi e Laboratorio, Sistemi Operativi e Sperimentazioni**      Università degli studi di Torino  
*Teaching Assistant*      October 2006 – October 2007
- Taught basic computer architecture notions and Operative Systems operations to undergraduate students.
  - Class led by Professor Cristina Baroglio and Professor Daniele Gunetti
- Laboratorio di Linguaggi**      Università degli studi di Torino  
*Teaching Assistant*      October 2005 – October 2006
- Taught C Language to undergraduate students.
  - Class led by Professor Cristina Baroglio and Professor Andrea Grosso

INTERNSHIP  
EXPERIENCE

- BEST, LLC (Hoboken)**      November - December 2011  
*Part-time Internship*
- Developed a prototype of proxy between J and OPENCL / CUDA

LANGUAGES

*Mother tongue:* Italian

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
<i>English</i>	B2 Independent user	C1 Proficient user	B1 Independent user	B1 Independent user	B1 Independent user
<i>French</i>	A1 Basic user	B1 Independent user	A1 Basic user	A1 Basic user	A1 Basic user
<i>Japanese</i>	A2 Basic user	A2 Basic user	A2 Basic user	A2 Basic user	A1 Basic user

- Japanese Language Proficiency Test (JLPT) – level 4**      February 2008
- Issued by Japan Foundation, Japan Educational Exchanges and Services

- Preliminary English Test (PET)**      June 2002
- Issued by Cambridge University