

# Mircea Filip LUNGU

Via Al Fiume 2  
Lugano, Switzerland  
+41-078-904.3235  
mircea.lungu@lu.unisi.ch  
<http://www.inf.unisi.ch/phd/lungu>

## Education

---

- 2004 - 2009 PhD student at the Faculty of Informatics from the University of Lugano.  
1999 - 2004 Student at the Computer Science Faculty from “Politehnica” University of Timișoara

## Employment

---

- Oct 2004 - Oct 2009 **Faculty of Informatics, University of Lugano, Switzerland**
- ▷ Researcher / Course Instructor. Teaching the *Software Atelier II: GUI Design* course. Preparing courses, grading assignments, preparing projects and exams. Leading master’s and bachelor’s projects.
  - ▷ PhD Student / Teaching Assistant. Assisting the *Programming Fundamentals I* and co-teaching the *Software Atelier II* course. Preparing courses, grading assignments, preparing projects and exams. Leading master’s and bachelor’s projects.
- 2007, Jul-Dec **IBM T.J. Watson Research Center, Hawthorne, NY**
- ▷ Intern/Co-op in the Next Generation Distributed Systems Group. Extending the Stream-sight visualization tool with support for visualizing and editing semantic descriptions of the components of large distributed workflow applications.
- 2001 - 2003 **Computervoice Systems, Romania**
- ▷ Software Developer (part-time). Working on Dependabill, a CRM system for for the telecommunications market in the United States
- 1999 - 2000 **Logos Highschool, Timișoara**
- ▷ Instructor. Teaching the introductory programming course with Pascal

## Research Experience

---

- 2008 **Consulting for a large telecommunications company**
- Member of a multi-disciplinary team developing the next social networking platform. Developing software in Ruby.
- 2005 **Consulting for a multinational software development company**
- Member of a team of specialists from across Europe working together to analyze a large legacy software system. Responsible with performing dependnecy analysis on the system.
- 2004 **Diploma thesis in collaboration with Software Composition Group from University of Bern**
- Extending the Detection Strategies Mechanism
  - Developing the Magnet View visualisation tool
- 2002 - 2004 **Member of the LOOSE Research Group (LRG)**
- Studying the evolution and re-engineering of object-oriented software systems
  - Reengineering and extending ProDeOOS - a quality assurance tool developed at LRG

## Community Service

---

- 2005 - 2008 Organizer of the *PhD Talks* at the Faculty of Informatics from University of Lugano. The seminar series are the place where PhD students talk about various topics they are interested in and practice presentation skills.
- 2005 - ... Reviewer for the following conferences and workshops: VisSoft 2005, SoftVis 2006, CSMR 2006, MSR 2006, ICPS 2006, ASE 2006, CSMR 2007, VissSoft 2007, Eurovis 2009, WCRE 2009, CSMR 2010, ICSE 2010

## Distinctions

---

- 2007 *1st Place at the ESUG Innovation Awards*. Competing with The Small Project Observatory - an online application aimed at visualizing project portfolios. ESUG is the primary European Smalltalk Conference.
- 2006 *Best poster award* for the poster entitled *Cutting Edge Software Visualization* presented at the 3rd International ACM Symposium on Software Visualization, Brighton, 2006
- 2003 *Best software engineer* award in the contest organized by the LOOSE (The Lab on Software Engineering) at the Polytechnic University of Timisoara, Romania
- 2002 The 2nd prize with the faculty's team at the "Hard & Soft" International Contest, Suceava, Romania. The contest was based on Image Processing and the project we developed was a security system
- 2001 The 3rd prize at the Mecrob programming contest, Timisoara, with the software simulation of a mechanical Robot
- 1999 The 3rd prize at the National Contest of Educational Software, Focsani

## Selected Projects

---

- 2007 - ... **The Small Project Observatory** - Framework for software ecosystem visualization and analysis. The project won the First Place in the ESUG Innovation Award Competition in 2007 (ESUG - European Smalltalk Conference)
- 2006 **iRetrospect**. A pet project that I started in order to be able to visualise the way I spend my time on the computer. In the same time I wanted to experience development for OS X with Cocoa and ObjectiveC.
- 2005 - ... **Softwareonaut**. A tool for software visualization and exploration. The goal of the tool is understanding large software systems by exploring their hierarchical decompositions. The application is developed using VisualWorks Smalltalk
- 2004 MagnetView. A software visualization tool for visualizing software artefacts and metrics
- 2002 Mircompilatorul. A compiler for Pascal written in Java
- 2000 Double-Triple-R. A 3D mechanical simulation of a robot. 3rd place at the local robotics contest

## Publications

---

- 2009 **Reverse Engineering Software Ecosystems.** Mircea Lungu PhD Thesis, University of Lugano, Switzerland. October 2009.  
**Promises and Perils of Porting Software Visualization Tools to the Web** Marco D'Ambros, Mircea Lungu, Michele Lanza, Romain Robbes In Proceedings of WSE 2009 (11th IEEE International Symposium on Web Systems Evolution), pp. xxx - xxx. IEEE CS Press, 2009.
- 2008 **Towards reverse engineering software ecosystems.** In proceedings of ICSM 2008 (24 IEEE Conference on Software Maintenance), pp. 428-431, IEEE Press, 2008. Doctoral Symposium.  
**A Teamwork-Based Approach to Programming Fundamentals with Scheme, Smalltalk, and Java** Michele Lanza, Amy Murphy, Romain Robbes, Mircea Lungu, Paolo Bonzini, Marco D'Ambros, Richard Wettel In Proceedings of ICSE 2008 (30th International Conference on Software Engineering, Education Track), pp. 787 - 790, ACM Press, 2008.
- 2007 **Reverse Engineering Super-Repositories.** Mircea Lungu, Michele Lanza, Tudor Girba, Reinout Heck In Proceedings of WCRE 2007 (14 Conference on Reverse Engineering), pp. 120 - 129, IEEE Computer Society, 2007.  
**Exploring Inter-Module Relationships in Evolving Software Systems,** Mircea Lungu, Michele Lanza. In Proceedings of CSMR 2007 (11th European Conference on Software Maintenance and Reengineering), pp. 91- 100, IEEE Computer Society, 2007
- 2006 **Biomedical Information Visualization,** Mircea Lungu, Kai Xu. Chapter in *Human Centered Visualization Environments*. Springer LNCS (to appear).  
**Package Patterns for Visual Architecture Recovery.** Mircea Lungu, Michele Lanza, Tudor Girba. In Proceedings of CSMR 2006 (10th European Conference on Software Maintenance and Reengineering), pp. 183 - 192, IEEE Computer Society, 2006  
**SoftwareNaut: Exploring Hierarchical System Decompositions** (Tool Demonstration) Mircea Lungu, Michele Lanza. In Proceedings of CSMR 2006 (10th European Conference on Software Maintenance and Reengineering), pp. 349 - 350, IEEE Computer Society, 2006  
**SoftwareNaut: Cutting the Edge in Software Visualization.** (Best Poster Award) Mircea Lungu, Michele Lanza. In Proceedings of the 3rd International ACM Symposium on Software Visualization (SoftVis 2006), pp. 179-180  
**Mondrian: An Agile Information Visualization Framework.** Michael Meyer, Mircea Lungu and Tudor Girba. In Proceedings of the 3rd International ACM Symposium on Software Visualization, (SoftVis 2006), pp. 135-144.  
**The Evolution Radar: Visualizing Integrated Logical Coupling Information.** Marco D'Ambros, Michele Lanza, Mircea Lungu. In Proceedings of MSR 2006 (3rd International Workshop on Mining Software Repositories), pp. 26-32, 2006.
- 2005 **Interactive Exploration of Semantic Clusters.** Mircea Lungu, Adrian Kuhn, Tudor Girba, Michele Lanza. In Proceedings of VISSOFT 2005 (3rd IEEE International Workshop on Visualizing Software For Understanding and Analysis), pp. 95 - 100, IEEE CS Press, 2005.
- 2004 **Conformity Strategies: Measures of Software Design Rules .** Diploma thesis defended at the "Politehnica" University of Timisoara (Romania), Department of Computer Science

## Programming Languages

---

<i>Lisp</i>	I teach <i>Scheme</i> at undergraduate level and enjoy writing Lisp for small projects
<i>Smalltalk</i>	For the last three years I have been working with <i>Smalltalk</i> and I came to appreciate the flexibility of the language and its simplicity. At the university of lugano I taught smalltalk during the Programming Fundamentals course.
<i>Java</i>	During the university years, I wrote a compiler for a simplified version of Pascal and a simple CRM application. During my 6 months of internship at IBM I developed an Eclipse plugin for visualizing large distributed systems specifications. I supervised a bachelor project implementing a software visualization plugin for the Eclipse IDE.
<i>Other</i>	While working as a software developer at Computervoice Systems, I acquired in-depth knowledge of <i>Visual C++</i> and MFC. I have taught <i>Pascal</i> at highschool level. Over the years I worked with many other languages: as Assembly, Prolog, Objective C, Ruby.

## Languages

---

*Romanian* is my native language. I speak fluently *English* and I have good knowledge of *Italian* and *French*. I am looking for a new language to learn.

## References

---

**Prof. Dr. Michele Lanza,**  
Faculty of Informatics  
University of Lugano.  
Email: michele.lanza@unisi.ch

**Prof. Dr. Radu Marinescu,**  
Faculty of Automation and Computer Science  
“Politehnica” University of Timișoara.  
Email: radum@cs.utt.ro

**Dr. Wim de Pauw,**  
IBM T.J. Watson Research Center.  
Email: wim@us.ibm.ch

**Dipl. Ing. Calin Sircuta,**  
Computervoice Systems, Romania.  
Email: sircux@computervoice.ro