

# Dr. Alexandre Bergel

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Born in Nice (France), March 23, 1978  
French nationality, free from military duty.

**Keywords:** Software Engineering, Object-Oriented Programming, Profiling, Performance, Testing, Teaching, Visualization

Since May 2009, I am Assistant Professor at the University of Chile. I am also associate researcher at INRIA, France. To make my research artifacts are not only useful to stack papers, I co-founded Object Profile ([ObjectProfile.com](http://ObjectProfile.com)).

## 1 University Education

**December 2001 – December 2005** *Ph.D.* at the University of Bern (Switzerland) in the Software Composition Group led by Prof. Oscar Nierstrasz and Prof. Stéphane Ducasse. Title: Class-boxes – Controlling Visibility of Class Extensions. Jury members: Prof. Dr. Stéphane Ducasse, Prof. Dr. Gerhard Jäger, Prof. Dr. Oscar Nierstrasz, Prof. Dr. Roel Wuyts. This work was awarded with the [Ernst Denert Software Engineering 2006 prize](#).

**2000 – 2001** *Diplôme d'Etudes Approfondies (DEA) d'informatique* (comparable to Master, after five years of studies) at the University of Nice-Sophia Antipolis. Master thesis done at the University of Adelaide (South-Australia) titled: “Définition et compilation d'un langage à affectation

unique vers un réseau de processus” under the supervision of Denis Caromel and Andrew L. Wendelborn.

**1999 – 2000** *Maîtrise d’informatique*. University of Nice-Sophia Antipolis.

**1998 – 1999** *Licence d’informatique*. University of Nice-Sophia Antipolis.

**1996 – 1999** *DEUG Mathématiques, Informatique, et Applications aux Sciences*. University of Nice-Sophia Antipolis.

## **2 Academic and Industrial Employment History**

**From May 2009** Full-time Assistant Professor at the University of Chile, Santiago, Chile, member of the PLEIAD Laboratory.

**October 2007 – May 2009** Full-time researcher at INRIA in Lille, France, permanent member of the RMoD research group.

**April 2007 – October 2007** Research Fellow in the Software Architecture Group, led by Robert Hirschfeld, at Hasso-Plattner-Institut ([www.swa.hpi.uni-potsdam.de](http://www.swa.hpi.uni-potsdam.de)).

**January 2006 – March 2007**. Research Fellow in the Distributed Systems Group, led by Siobhán Clarke and Vinny Cahill. I was also a staff member of Lero, the Irish Software Engineering Research Centre ([www.dsg.cs.tcd.ie](http://www.dsg.cs.tcd.ie), [www.lero.ie](http://www.lero.ie)).

**July 2000 – February 2001**. *Mobile Telephony with BimSolutions*. WAP application development for small embedded systems such as handheld computers and handphoned. ([www.bimsolutions.com](http://www.bimsolutions.com))

**July 2000 – February 2001**. *Project OASIS, INRIA Sophia Antipolis*. Involved in the development of a remote debugger and controller (IC2D) for distributed applications.

**February 2000 – July 2000**. *Project SmartTools, INRIA Sophia Antipolis*. Development of a graph layout algorithm.

**July 1999 – October 1999**. *Project OASIS, INRIA Sophia Antipolis*. Involved into the development of C++//, a library to build distributed applications in C++ using remote objects.

**July 1998 – June 1999**. *GSX Solution*. Java development on monitoring of Lotus Notes servers (<http://www.gsx.net>).

### 3 Research Community Implications

#### Program Committee.

I am program committee co-chair of:

- *3rd IEEE Working Conference on Software Visualization (IEEE VISSOFT'15)*  
<http://vissoft.dcc.uchile.cl>
- *Software Composition 2009 (SC'09)*  
<http://www.2009.software-composition.org>
- *International Workshop on Smalltalk Technologies 2009 (IWST'09)*  
<http://www.esug.org/Conferences/2009/InternationalWorkshop> ,<http://portal.acm.org>

I served in the following program committee of the following events:

- *31th ACM Symposium on Applied Computing (SAC 2016), Object-Oriented Languages and Systems track (OOPS)*
- *ICSE 2016 ACM Student Research Competition*
- *4th International Conference on Model-Driven Engineering and Software Development (MODELWARD 2016)*
- *Student Contest on Software Engineering (SCORE'16), collocated with ICSE 2016*
- *2015 European Open Symposium on Empirical Software Engineering (EOSESE 2015)*
- *Conférence en Ingénierie du Logiciel (CIEL'15)*
- *3rd International Workshop on Ecosystem Architectures (WEA'15)*
- *7th Workshop on Software Ecosystems (IWSECO'15)*
- *Argentine Symposium on Software Engineering (ASSE'15)*
- *The IEEE International Conference on Software Maintenance and Evolution (ICSME 2015)-Early Research Achievements (ERA) Track*
- *Workshop on Software Visualization, Maintenance, and Evolution 2015 (VEM'15)*
- *30th ACM Symposium on Applied Computing (SAC 2015), Object-Oriented Languages and Systems track (OOPS)*
- *22nd International Conference on Software Analysis, Evolution, and Reengineering (SANER 2015)*
- *22nd International Conference on Software Analysis, Evolution, and Reengineering, Early Research Achievements (SANER-ERA 2015)*
- *Workshop on Software Visualization, Maintenance, and Evolution 2015 (VEM'14)*

- *International Workshop on Smalltalk Technologies (IWST 2014)*
- *2nd IEEE Working Conference on Software Visualization - NIER (VISSOFT 2014 NIER)*
- *XL Conferencia Latinoamericana en Informática (CLEI 2014)*
- *3rd Conférence en Ingénierie du Logiciel (CIEL 2014)*
- *9th International Conference on Evaluation of Novel Software Approaches to Software Engineering (ENASE 2014)*
- *International Conference on Software Paradigm Trends (ICSOFT-PT 2014)*
- *Early Research Achievements at the joint meeting of the CSMR and WCRE conferences (CSMR-WCRE ERA 2014)*
- *ACM Symposium on Applied Computing, Object-Oriented Languages and Systems track (OOPS 2014)*
- *Latin American Workshop on Formal Methods (LAFM 2013)*
- *Student Research Competition (SRC), collocated with ICSE 2014*
- *International Workshop on Smalltalk Technologies 2012 (IWST'13)*
- *2nd International Conference on Model-Driven Engineering and Software Development (MODELWARD'14) – January 7-9, 2014, <http://www.modelsward.org>*
- *2nd International Conference on Model-Driven Engineering and Software Development (MODELWARD'14) – January 7-9, 2014, <http://www.modelsward.org>*
- *Academic Software Development Tools and Techniques (WASDeTT'13) – July 1st, 2013, <http://wasdett.org/2013/>*
- *20th Working Conference on Reverse Engineering (WCRE'13) – October 14-17, 2013, <http://wcre.wikidot.com/2013>*
- *ESEC/FSE 2013, AEC – Artifact Evaluation Committee co-chair, 9th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*
- *Conférence en Ingénierie du Logiciel 2013 (CIEL)*
- *International Conference on Software Composition 2013 (SC'13)*
- *27th European Conference on Object-Oriented Programming (ECOOP'13)*
- *Object Oriented Programming Languages and Systems - ACM SAC 2013 (OOPS'13)*
- *International Workshop on Smalltalk Technologies 2012 (IWST'12)*
- *6th International Conference on Smalltalk Technologies (Smalltalks'12) – November 3th-5th, 2012, Argentina, [scg.unibe.ch/wiki/events/smalltalks12](http://scg.unibe.ch/wiki/events/smalltalks12)*

- *WEWST 2012*: 7th Workshop on Enhanced Web Service Technologies
- *CIEL 2012*: Conférence en Ingénierie du Logiciel – June 18 - 23, 2012, Rennes, France.  
<http://gpl2012.irisa.fr/>.
- *CibSE 2012*: XV Ibero-American Conference on Software Engineering, Doctoral Symposium – April 24 - 27, 2012, Buenos Aires, Argentina.  
<http://cibse2012.unlam.edu.ar/home/>.
- *ICSOFT 2012*: 6th International Conference on Software and Data Technologies – July 24 - 27, 2012, Roma, Italy.  
<http://www.icsoft.org>.
- *PPPJ 2012*: 10th International Conference on the Principles and Practice of Programming in Java
- *GPCE 2012*: 11th International Conference on Generative Programming and Component Engineering
- *FREECO 2011*: 2nd Workshop on Free Composition, collocated with SPLASH/Onward!
- *Smalltalks 2011*: 5th Argentine Conference on Smalltalk – Research Track
- *SCCC 2011*: 30th International Conference of the Chilean Computer Science Society – November 9-11, 2011, Curicó, Chile.  
[jcc2011.otalca.cl](http://jcc2011.otalca.cl)
- *DSLRob 2011*: 2nd International Workshop on Domain-Specific Languages and models for ROBotic systems – San Francisco, USA.
- *WEWST 2011*: 6th Workshop on Enhanced Web Service Technologies – September 14, 2011, Lugano, Switzerland.  
[www.inf.usi.ch/faculty/binder/wewst11/](http://www.inf.usi.ch/faculty/binder/wewst11/)
- *RAM-SE 2011*: 8th Workshop on Reflection, AOP and Meta-Data for Software Evolution – June 27, 2011, Zürich, Switzerland.  
[www-users.cs.york.ac.uk/manuel/Events/RAM-SE11/RAM-SE11](http://www-users.cs.york.ac.uk/manuel/Events/RAM-SE11/RAM-SE11)
- *SCLIT 2011*: Symposium on Computer Languages, Implementations, and Tools – September 19-25, 2011, Halkidiki, Greece.
- *ICSOFT 2011*: 6th International Conference on Software and Data Technologies – July 18 - 21, 2011, Seville, Spain.  
<http://www.icsoft.org>.
- *International Workshop on Smalltalk Technologies 2011 (IWST'11)*: International Workshop on Smalltalk Technologies – August 23, 2011, Edinburgh, UK.  
<http://www.esug.org>.
- *TOOLS Europe 2011*: 49th International Conference on Objects, Models, Components and Patterns – June 27, 2011 - July 01, 2011, Zurich, Switzerland.
- *SEFM 2011*: 9th IEEE International Conference on Software Engineering and Formal Methods – September 13-18, 2011, Montevideo, Uruguay.

- *SAC 2011*: Programming Languages (PL) Track at the 26th ACM Symposium on Applied Computing – March 21-25, 2011, Taichung, Taiwan.  
<http://www.inf.usi.ch/faculty/binder/wewst10/>.
- *ICSM 2010*: 26th IEEE International Conference on Software Maintenance, Tool Demonstration Track – September 12-18, 2010, Timisoara, Romania.  
<http://icsm2010.upt.ro/calls/tool-demos>.
- *WEWST 2010*: 5th Workshop on Enhanced Web Service Technologies – December 1, 2010, Ayia Napa, Cyprus.  
<http://www.inf.usi.ch/faculty/binder/wewst10/>
- *SCCC 2010*: XXIX Conferencia Internacional de la Sociedad Chilena de Ciencia de la Computacion – November 15-19, 2010, Antofagasta, Chile.  
<http://jcc2010.infonor-chile.cl>
- *Smalltalks 2010*: 4th Argentine Conference on Smalltalk – Research Track – November , 2010, Buenos Aires, Argentina.  
<http://www.fast.org.ar>
- *FAMOOSr 2010*: 4th Workshop on FAMIX and Moose in Reengineering – September 17, 2010, Timisoara, Romania.  
<http://www.moosetechnology.org/events/famoosr2010>.
- *MajecSTIC 2010*: MANifestation des JEunes Chercheurs en Sciences et Technologies de l'Information et de la Communication – October , 2010, Bordeaux, France.  
<http://majecstic2010.labri.fr/>.
- *DSLRob 2010*: 1st International Workshop on Domain-Specific Languages and models for ROBotic systems (collocated with *IROS' 10*) – October , 2010, Taipei, Taiwan.  
<http://www.doesnotunderstand.org/wikka.php?wakka=DSLRob10>.
- *ROOTS 2010*: 1st ECOOP'2010 International Workshop on Real-time Object-Oriented Technologies – June 22, 2010, Maribor, Slovenia.  
[http://www.cs.purdue.edu/roots10/ROOTs\\_2010](http://www.cs.purdue.edu/roots10/ROOTs_2010).
- *RAM-SE 2010*: 7th ECOOP'2010 Workshop on Reflection, AOP and Meta-Data for Software Evolution – June 21, 2010, Maribor, Slovenia.  
<http://www-users.cs.york.ac.uk/manuel/Events/RAM-SE10>.
- *ICSOFT 2010*: 5th International Conference on Software and Data Technologies – July 22 - 24, 2010, Athens, Greece.  
<http://www.icsoft.org>.
- *CLEI 2010*: XXXVI Latin American Conference on Informatics – October 18-22, 2010, Asunción, Paraguay.  
[www.clei2010.org.py](http://www.clei2010.org.py).
- *TOOLS 2010*: 48th International Conference Objects, Models, Components, Patterns – June 28 - July 2, 2010, Malaga, Spain.  
<http://malaga2010.lcc.uma.es>.

- *INTENSIVE 2010*: 2nd International Conference on Intensive Applications and Services. – March 7 - 13, 2010, Cancun, Mexico, under InfoSys 2010 umbrella.  
<http://www.iaria.org/conferences2010/ComINTENSIVE10.html>.
- *PL-SAC 2010*: Programming Languages (PL) Track at the 25th ACM Symposium on Applied Computing – March 22 - 26, 2010, Sierre, Switzerland.  
<http://www.acm.org/conferences/sac/sac2010/>.
- *RAM-SE 2009*: 6th ECOOP'2009 Workshop on Reflection, AOP and Meta-Data for Software Evolution – July 7, 2009, Genova, Italy.  
<http://www-users.cs.york.ac.uk/~manuel/Events/RAM-SE09/>.
- *ICSOFT 2009*: 4th International Conference on Software and Data Technologies – July 26 - 29, 2009, Sofia, Bulgaria.  
<http://www.icsoft.org>.
- *Smalltalks 2009*: 2da Conferencia Argentina de Smalltalk. – November 13 - 15, 2009, Buenos Aires, Argentina.  
<http://neuquina.lifia.info.unlp.edu.ar:8001/Smalltalks-2008>.
- *INTENSIVE 2009*: 1st International Conference on Intensive Applications and Services. – April 21-25, 2009, Valencia, Spain, under InfoSys 2009 umbrella.  
<http://www.iaria.org/conferences2009/INTENSIVE09.html>.
- *TOOLS 2009*: 47th International Conference Objects, Models, Components, Patterns – Zürich, Switzerland.  
<http://tools.ethz.ch>.
- *ICSOFT 2008*: 3rd International Conference on Software and Data Technologies – July 5-8, 2008, Porto, Portugal.  
<http://www.icsoft.org>.
- *Web Technologies Track at SAC 2008*: the 23rd Annual ACM Symposium on Applied Computing (SAC'2008) – March 16 - 20, 2008, Fortaleza, Ceará, Brazil.  
[www.acm.org/conferences/sac/sac2008](http://www.acm.org/conferences/sac/sac2008).
- *SC 2008*: 7th International Symposium on Software Composition – 29 - 30 mars 2008, Budapest, Hungary.  
[www.2008.software-composition.org](http://www.2008.software-composition.org).
- *ICSOFT 2007*: 2nd International Conference on Software and Data Technologies – July 22-25, 2007, Barcelona, Spain.  
<http://www.icsoft.org>.
- *SC 2007*: Software Composition Symposium SC 2007 – Braga, Portugal, March 24 - April 1, 2007.  
<http://ssel.vub.ac.be/sc2007>.
- *EIWAS 2006*: 3rd European Workshop on Aspects in Software – Enschede, The Netherlands, August 31 and September 1, 2006.  
<http://janus.cs.utwente.nl:8000/twiki/bin/view/EIWAS2006/WebHome>.

- *NODE 2006*: Net. Object Days, Objects, Aspects, Services, the Web – Erfurt, Germany, September 18-21, 2006.  
<http://www.netobjectdays.org>.
- *MajecSTIC 2006*: Conférence nationale consacrée aux sciences et technologies de l’information et de la communication.  
<http://web.univ-ubs.fr/lester/www-lester/Evenements/Majecstic/index.php>.
- *ICSOFT 2006*: International Conference on Software and Data Technologies – September 11-14, 2006, Setúbal, Portugal.  
<http://www.icsoft.org/ICSOFT2006>.
- *SC 2006*: Software Composition – March 25-26, 2006, Vienna, Austria.  
<http://www.emn.fr/x-info/obasco/events/sc06>.
- *IWSAC 2005*: 2nd International Workshop on Software Aspects of Context – Santorini, Greece, July 14, 2005.  
<http://diuf.unifr.ch/people/kouadri/iwsac05>.
- The Euromicro CBSE Track on Software Engineering and Advanced Applications – August 30 - September 3, 2005. Porto, Portugal.  
<http://www.idt.mdh.se/euromicro-2005>.

**Reviewer.** I am a reviewer of the following international journals:

- Information and Software Technology (INFSOF-D-15-00413)
- Software Quality Journal (SQJO-D-15-00068)
- ACM Transactions on Architecture and Code Optimization (TACO-2015-56)
- Science of Computer Programming (SCICO-D-14-00035)
- Journal of Software: Evolution and Process (JSME-13-0145)
- Science of Computer Programming (February 2011, SCICO-D-11-00037). Editor: Mark van den Brand, Kim Mens and Holger Kienle.
- Transactions on Aspect-Oriented Software Development (November 2010). Editor: Gary T. Leavens.
- Software: Practice and Experience (SPE-08-0086, SPE-10-0076, SPE-10-0166). Editor: Nigel Horspool.
- Software: Practice and Experience (SPE-11-0254). Guest editors: Alain Plantec and Loic Lagadec
- Member of the J.UCS board editor (Journal of Universal Computer Science) (D.1.5 and D.3.3 ACM classification)  
([www.jucs.org/jucs\\_articles\\_by\\_author/Bergel\\_Alexandre/BusinessCard](http://www.jucs.org/jucs_articles_by_author/Bergel_Alexandre/BusinessCard))
- ACM Reviewer (#7802) for Computing Reviews (<http://www.reviews.com>). Featured reviewers February 2012



- Transactions on Software Engineering (TSE-0024-0107). Editor: Harold Ossher.
- Transactions on Software Engineering (TSESI-2008-03-0115). *Special Issue on Software Language Engineering*, Guest editors: Jean-Marie Favre, Dragan Gasečić, Ralf Lämmel, Andreas Winter.
- International Journal IEEE Software (SWSI-0231-1206), *Special issue on Rapid Application Development with Dynamically Typed Languages*. Guest editors: Laurence Tratt and Roel Wuyts. September/October '07.

As an external reviewer, I reviewed papers in these following events:

- *International conferences* :
  - \* 17th International European Conference on Parallel and Distributed Computing (Europar 2011)
  - \* 15th European Conference on Software Maintenance and Reengineering (CSMR 2011)
  - \* European Conference in Object-Oriented Programming (ECOOP 2010)
  - \* 18th European Symposium on Programming (ESOP 2009)
  - \* International Conference on Program Comprehension (ICPC 2008)
  - \* 11th European Conference on Software Maintenance and Reengineering (CSMR 2007, 2008)  
<http://doi.ieeecomputersociety.org/10.1109/CSMR.2007.18>
  - \* Working Conference on Reverse Engineering (WCRE 2006)
  - \* European Conference in Object-Oriented Programming (ECOOP 2004, 2005, 2006, 2007)
  - \* Object-Oriented Programming Systems, Languages and Applications (OOPSLA 2002)
  - \* UML (2004, 2005)
  - \* MODELS (2006, 2007)
  - \* European Smalltalk User Group Research Track (ESUG 2003, 2004)
  - \* International Conference on Software Maintenance (ICSM 2005, 2008)
- *National conferences*:
  - \* Langages et Modèle à Objets (LMO 2003, 2004, 2005, 2006, 2008, 2009)
  - \* Net.ObjectDays (NODE 2005)

### **Project reviewer.**

- FONCYT (Argentina), PICT-2014-3391
- Conicyt (Chile), 2012, 2013, 2014, 2015
- Netherlands Organisation for Scientific Research (NWO), 2012
- Concurso de Atracción de Capital Humano del Extranjero, Modalidad de Estadías Cortas, MEC, 2012

- Becas Chile – *Cs. Computación e Informática*
- Swiss National Science Foundation (SNSF) <http://www.snf.ch>, 2010
- Swiss National Science Foundation (SNSF) <http://www.snf.ch>, 2009

### **Summer school.**

- Lectures *Object-oriented programming with Smalltalk and Modularity beyond inheritance* ([pleiad.dcc.uchile.cl/pl2008](http://pleiad.dcc.uchile.cl/pl2008)). Slides available on <http://bergel.eu/presentations.html>

### **Organization and Participation.**

- 6th Workshop on Dynamic Languages and Applications, in conjunction with ECOOP 2012. [scg.unibe.ch/wiki/events/dyla2012](http://scg.unibe.ch/wiki/events/dyla2012). June 2011, in Beijing, China.
- 5th Workshop on Dynamic Languages and Applications, in conjunction with TOOLS 2011. [scg.unibe.ch/wiki/events/dyla2011](http://scg.unibe.ch/wiki/events/dyla2011). July 1, 2011, in Zurich, Switzerland.
- 4th Workshop on Dynamic Languages and Applications, in conjunction with TOOLS 2010. [scg.unibe.ch/wiki/events/dyla2010](http://scg.unibe.ch/wiki/events/dyla2010). June 28, 2010, in Malaga, Spain.
- 2nd International Workshop on Traits: <http://rmod.lille.inria.fr/pier/TRAIT+2009>
- 47th Tools Europe 2009, co-workshop chair: [tools.ethz.ch/committees.html](http://tools.ethz.ch/committees.html)
- 46th Tools Europe 2008, co-workshop chair: [tools.ethz.ch/tools2008/committees.html](http://tools.ethz.ch/tools2008/committees.html)
- 3rd Workshop on Dynamic Languages and Applications, in conjunction with ECOOP 2007. <http://dyla2007.unibe.ch>. July 31, 2007, in Berlin, Germany.
- Committee member of *Trinity Research Staff Association* (TRSA, [www.tcdlife.ie/trsa](http://www.tcdlife.ie/trsa)), 2006.
- Member of MOOSE Association <http://moose.unibe.ch/association>
- Three workshops on the Smalltalk programming languages at the University of Bern (March 16, 2002, February 15, 2003, and March 12, 2005). For each of them, about 20 people attended
- *LMO 2005* in the University of Bern. Responsible of the website, mailing lists and the logistic.

### **Invited Keynote Speaker.**

- *Jornadas Chilenas de Computación 2009* (<http://jcc2009.usach.cl/>) Title : *Restrospective on Traits*
- *Konference Objekty 2006* Prague. November 23, 2006. Local conference on languages and object models. Title: *Controlling the Scope of Change in Java with Classboxes*.

**Visited Research Labs and Given Talks.** Some of my presentations may be seen online on [www.slideshare.net/bergel](http://www.slideshare.net/bergel)

- *Université de Montréal (Canada)*. March 5, 2015. Contact : Houari Sahraoui.
- *Commissariat d'Énergie Atomique (CEA) (Paris, France)*. June 3, 2014. Contact : Goubier Thierry.
- *Universidade Federal de Minas Gerais (Brazil)*. May 28, 2014 - June 2, 2014. Contact : Prof. Marco Tulio Valente.
- *University of Nice Sophia-Antipolis (France)*. June 19, 2010 - July 4, 2010. Contact : Prof. Mireille Blay-Fornarino.
- *RMoD – INRIA Lille Nord Europe (France)*. June 11 - 18, 2010. Contact : Dr. Stéphane Ducasse.
- *University of Lugano (Switzerland)*. June 7 - 11, 2010. Contact : Prof. Walter Binder.
- *SPIN Chile - Mejore la Calidad de su Software usando Mapas de Software*. June 2, 2010. Contact : [www.spin.cl](http://www.spin.cl).
- *University of La Plata (Argentina)*. May 17 - 23, 2010. Contact : Gabriela Arévalo.
- *Universidad Mayor (Chile) - Reflexion on code quality*. May 7, 2010. Contact : Alejandra Acuña.
- *University of Nice Sophia-Antipolis (France) - Assessing code quality with Moose*. December 18, 2009. Contact : Mireille Blay-Fornarino, Philippe Salvan.
- *SPIN Chile - Evaluación de la evolución y Calidad del Software con Moose*. September 9, 2009. Contact : [www.spin.cl](http://www.spin.cl).
- *University of York, England*. October 24, 2009. Contact : Dr. Manuel Oriol.
- *Club Qualimétrie (Paris, France)*. September 23, 2009. Contact : [clubqualimetrie.fr](http://clubqualimetrie.fr).
- *École des Mines de Douai*. June 23, 2009. Contact : Dr. Noury Bouraqadi.
- *Département d'Informatique en Recherche Opérationnelle (DIRO), Université de Montréal (Canada)*. November 25, 2007. Contact : Prof. Houari Sahraoui & Prof. Yann-Gaël Guéhéneuc.
- *INRIA, Sophia-Antipolis (France)*. July 9, 2007. Contact : Manuel Serrano.
- *University of Cottbus (Brandenburgische Technische Universität Cottbus), Branderburg (Germany)*. June 15, 2007. Contact : Prof. Claus Lewerentz.
- *King's College, London (England)*. April 30, 2007. Contact : Dr. Laurence Tratt.
- *INRIA, Bordeaux (France)*. March 26, 2007. Contact : Prof. Charles Consel.
- *Vrije Universiteit Brussel (Belgium)*. February 23, 2007. Contact : Prof. Dr. Wolfgang De Meuter.

- *INRIA, ADAM project, Lille (France)*. February 22, 2007. Contact : Prof. Laurence Duchien.
- *INRIA, Obasco project, Nantes (France)*. January 19, 2007. Contact : Prof. Pierre Cointe.
- *University of Bonn (Germany)*. January 8, 2007. Contact : Dr. Günter Kniesel.
- *Fakulta elektrotechnická, České vysoké učení technické v Praze, (University of Prague), (Czech Republic)*. November 21-23, 2006. Contact : Juraj Kubelka.
- *University of Limerick (Ireland)*. November 3, 2007. Contact : Prof. Dr. Kevin Ryan.
- *Universita della Svizzera Italiana (University of Lugano), (Switzerland)*. June 21, 2006. Contact : Prof. Dr. Michele Lanza, Romain Robbes.
- *Eidgenössische Technische Hochschule Zürich (ETH, Swiss Federal Institutes of Technology Zurich, Switzerland)*. June 20, 2006. Contact : Prof. Dr. Bertrand Meyer, Dr. Ilinca Ciupa.
- *National University of Ireland – NUI in Galway (Ireland)*. April 11, 2006. Contact : Dr. Michael McGettrick.
- *University College Dublin – UCD in Dublin (Ireland)*. February 24, 2006. Contact : Dr. Aaron John Quigley.
- *Technische Universität Dresden (Germany)*. December 15, 2005. Contact : Prof. Dr. Uwe Aßman.
- *University of Technology in Darmstadt (Germany)*. November 15, 2005. Contact : Prof. Dr. Klaus Ostermann, Prof. Dr. Mira Mezini.
- *Trinity College in Dublin (Ireland)*. November 9, 2005. Contact : Dr. Siobhán Clarke.
- *Ecole Polytechnique Fédérale de Lausanne (Switzerland)*. November 3, 2005. Contact : Prof. Dr. Martin Odersky.
- *University of Karlsruhe (Germany)*. October 28, 2005. Contact : Prof. Dr. Walter F. Tichy.
- *University of Fribourg (Switzerland)*. October 4, 2005. Contact : Prof. Dr. Jacques Pasquier.
- *University of Geneva (Switzerland)*. September 30, 2005. Contact : Dr. Giovanna Di Marzo.
- *Open University (United Kingdom)*. September 19, 2005. Contact : Prof. Dr. Bashar Nuseibeh.
- *Rencontres Mondiales pour le Logiciel Libre (RMLL)*. July 8, 2005. Title: Introduction to Smalltalk. Theme: High-level languages.
- *Vrije Universiteit Brussel (Belgium)*. June 22, 2005. Contact : Prof. Dr. Theo D’Hondt.
- *University of Antwerp (Belgium)*. June 16, 2005. Contact : Prof. Dr. Serge Demeyer.
- *Université Libre de Bruxelles (Belgium)*. June 13-24, 2005. Contact : Prof. Dr. Roel Wuyts. Goal of the visit: Trait-based object-oriented programming language, Stratos.
- *Wydział Matematyki, Informatyki i Mechaniki (Warsaw, Poland)*. January 18, 2005. Contact : Dr. Jacek Chrzaszcz.

- *University of Bonn (Germany)*. December 9, 2004. Contact : Dr. Günter Kniesel. Lecture: Dynamic AOP with Dynamic Classboxes and Friends.  
[www.iam.unibe.ch/~bergel/download/DynamicAOPBonn.pdf](http://www.iam.unibe.ch/~bergel/download/DynamicAOPBonn.pdf)
- *Université du Québec à Montréal (UQÀM) (Canada)*. November 22, 2004. Contact : Prof. Hafedh Mili.
- *Département d'Informatique en Recherche Opérationnelle (DIRO), Université de Montréal (Canada)*. November 25, 2004. Contact : Prof. Houari Sahraoui.
- *Department of computer science, Vrije Universiteit, Amsterdam*. June 24, 2004. Contact : Dr. Fabrice Huet.
- *National University of Singapore (NUS)*. June 3, 2004. Contact : Prof. Stanislaw Jarzabek.
- *I3S (Informatique Signaux et Systèmes de Sophia Antipolis), Rainbow Project*. April 9, 2004. Contact : Dr. Mireille Blay.
- *Polish-Japanese Institute of Information Technology (Warsaw, Poland)*. January 14, 2003. Contact : Prof. Kazimiers Subieta.
- *Brno University of Technology (Czech Republic)*. June 4, 2003. Contact : Vladimir Janousek.
- *University of Targoviste (Romania)*. April , 2003 April 2003. Contact : Luminitia Duta.
- *University of Adelaide (South-Australia)*. March - October , 2001. Contact : Dr. Andrew L. Wendelborn.

Participation at the Dagstuhl seminar 06181 titled *Latently-Typed Languages*. May 2006.

#### **Awards.**

- “Academico destacado” delivered by the University of Chile for the book “Deep into Pharo”. April 24, 2015
- Distinguished Reviewer Award, delivered at the IEEE Computer Society SANER Conference 2015.
- First position at the 9th Innovation Technology Awards organized by ESUG’12 for our project titled “Object-Centric Debugging”
- First position at the 9th Innovation Technology Awards organized by ESUG’12 for our project titled “Object-Centric Debugging”
- Best paper award for *Generics and Reverse Generics for Pharo*, at the ICSOFT (International Conference on Software Technologies), 2012, Rome.
- Finalist Desafio Intel 2011. <http://desafiointel.com>
- Winner of the international Ernst Denert Software Engineering Award 2006 ([www.denert-stiftung.de](http://www.denert-stiftung.de)). Delivered on October 4th, 2006, by the Ernst Denert foundation during the annual GI conference (Gesellschaft für Informatik E.V. [www.gi-ev.de](http://www.gi-ev.de))
- Best paper award for *Classboxes : A Minimal Module Model Supporting Local Rebinding*, at the JMLC (Join Modular Languages Conference), 2003, Bled (Slovenia).

## Funds raised.

- STICAmSud 2014. Title: “Dynamic analysis for software (re-)architecting”., with INRIA Lille Nord Europe and Federal University of Minas Gerais (Brazil). 17 700 euros
- Google Summer of Code 2013, Mentor. Title: “The GraphET chart and graph library”. Student: Daniel Aviv Notario. 4000 USD
- ESUG Summer of Code 2013, Mentor. Title: “Roassal on Amber”. Student: Pablo Estefo. 2000 USD
- ESUG Summer of Code 2013, Mentor. Title: “The Gadget Profiler Framework”. Student: Alejandro Infance. 2000 USD
- Google Summer of Code 2012, Mentor. Title: “Multidimensional Profiler with Rize!” . Student: Juan Pablo Sandoval. 4000 USD
- Google Summer of Code 2012, Mentor. Title: “Test Coverage comparison with TestSurgeon”. Student: Pablo Estefo. 4000 USD
- *ECOS-CONICYT ASPIRE: Assess, Visualize and Reengineer Software Engineering processes.* Principal researchers: Alexandre Bergel and Mireille Blay-Fornarino. 2011 - 2013.
- *FONDECYT* funded by the Chilean Research Agency (~ 100 000 USD). Title: “ALMA: Analyses and Tools for Monitoring and Improving Software Quality” – 1120094
- *U-INICIA* funded by the University of Chile for a duration of two years. Amount obtained: 10 millions of Chilean pesos (~ 15 000 euros). 2011 – 2012
- *Associated team* with the RMoD research lab at INRIA Lille Nord Europe for 3 years (15,000 euros for the first year) <http://pleiad.dcc.uchile.cl/research/plomo>. Title “PLOMO: Customizable Tools and Infrastructure for Software Development and Maintenance”. 2011 – 2013
- Google Summer of Code 2010, Mentor. Title: “Visualization of profiling information in Pharo and Squeak” . 4000 USD
- STICAmSud - *CoReA: Comprehension and Remodularization of Applications based on Aspects, Classboxes and Traits.* <http://corea.dcc.uchile.cl>  
*International coordinator:* Alexandre Bergel, *national coordinators:* Gabriela Beatriz Arévalo (Universidad Nacional de La Plata - Argentina); Johan Fabry (Universidad de Chile - Chile); Stéphane Ducasse (INRIA Lille Nord Europe). Public funding: 30 744 euros. Beginning-end: March 2009-March 2011.  
[www.sticamsud.org/Proyectos/ProyectosAprobados](http://www.sticamsud.org/Proyectos/ProyectosAprobados)
- SQUALE - Software QUALity Enhancement. Partners: Air France, PSA, Bouygues Télécom, INRIA, Université de Saint-Denis. Total cost: 2833 K euros, Public funding: 1240 K euros.
- Invited scientist at the DCC - Universidad de Chile, in the FONDECYT Project 11060493 - Modularization and Adaptation of Complex and Dynamic Software Systems. For a total of 2800 euros.

## 4 Consulting

The largest part of my research results have a practical application. I have carried out case studies in a number of small and large companies

- *Lam Research*, USA, October- December, 2011.
- *Inmotion*, Santiago (Chile), October 13, 2011. Contact: Andres Model and Rocco Abiuso
- *Caesar System*, Buenos Aires (Argentina), May 20, 2010. Contact: Leandro Caniglia,
- *America XXI*, Santiago (Chile), October 6, 2009. Contact: Sebastián Pastine Sepúlveda, [www.americaxxi.cl](http://www.americaxxi.cl)
- *NIC Chile*, Santiago (Chile), September 15, 2009. Contact: Jose Urzua, [www.nic.cl](http://www.nic.cl)
- *Synopsys*, Santiago (Chile), September 11, 2009. Contact: Victor Grimblatt.  
<http://www.synopsys.cl>
- *Cast Software*, Meudon (Paris, France), January 21, 2009. Contact: Razak Ellafi.  
<http://www.castsoftware.com>
- *Software Improvement Group B. V.*, Amsterdam (Netherlands), November 28, 2009. Contact: Jose Pedro Correia and Joost Visser, <http://www.sig.nl>
- *Deisk*, Villeneuve Saint Georges (France), October 8, 2008. Contact: Jean-Hervé Laveau,  
<http://www.deisk.com>

## 5 Main Publications

All publications (or a working version of) are downloadable from my webpage. Each paper presented below was reviewed by a committee ([www.bergel.eu](http://www.bergel.eu)).

To make research funding institution happy, conferences and journals ranked A are indicated with a \*. The list are available on [http://core.edu.au/cms/images/downloads/journals/08sortrankalpha-ERA2010\\_journal\\_title\\_list.pdf](http://core.edu.au/cms/images/downloads/journals/08sortrankalpha-ERA2010_journal_title_list.pdf) and [http://core.edu.au/cms/images/downloads/conference/08sort%20acronymERA2010\\_conference\\_list.pdf](http://core.edu.au/cms/images/downloads/conference/08sort%20acronymERA2010_conference_list.pdf).

### Book

- [1] Alexandre Bergel, Damien Cassou, Stéphane Ducasse, Jannik Laval, *Deep into Pharo*. Published by Square Bracket Associates, 421 pages

### Refereed Articles in International Journals

- [2] Tobias Kuhn, Alexandre Bergel, *Verifiable Source Code Documentation in Controlled Natural Language*. *Science of Computer Programming (SCP)*, to appear
- [3] Julio A. Hurtado Alegría, María Cecilia Bastarrica, Alexandre Bergel, *AVISPA: A Tool for Analyzing Software Process Models*. *Journal of Software: Evolution and Process*, to appear

- [4] Jorge Ressia, Alexandre Bergel, Oscar Nierstrasz, *Modeling Domain-Specific Profilers*, in *The Journal of Object Technology (JOT)*, Volume 11, no. 1 (April 2012)
- [5] Alexandre Bergel, Felipe Banados, Romain Robbes, David Roethlisberger, *Spy: A Flexible Code Profiling Framework*, in *Computer Languages, Systems and Structures*, Elsevier. Volume 38 Issue 1, April 2012
- [6] \* Alexandre Bergel, Felipe Bañados, Romain Robbes, Walter Binder, *Execution profiling blueprints*, in *Software: Practices and Experience*, Elsevier. Accepted in aug 2011
- [7] Alexandre Bergel, *Reconciling Method Overloading and Dynamically Typed Scripting Languages*, Published in *Computer Languages, Systems and Structures*, Elsevier, 2011, to appear. Impact Factor 0.619.
- [8] \* Alexandre Bergel, William Harrison, Vinny Cahill, Siobhán Clarke, *FlowTalk: Language Support for Long-Latency Operations in Embedded Devices*, *IEEE Transactions on Software Engineering*, Volume 37, Number 4, pp. 526-543, Jul/Aug 2011
- [9] Alexandre Bergel, Stéphane Ducasse, Oscar Nierstrasz, and Roel Wuyts, *Stateful Traits and their Formalization*, Published in *Computer Languages, Systems and Structures*, 2007. Elsevier, Impact Factor 0.619
- [10] Alexandre Bergel, Stéphane Ducasse, Colin Putney, and Roel Wuyts, *Creating Sophisticated Development Tools with OmniBrowser*, Published in *Computer Languages, Systems and Structures*, 2007. Elsevier, Impact Factor 0.619
- [11] Alexandre Bergel, Stéphane Ducasse, and Oscar Nierstrasz, *Analyzing Module Diversity*, In *Journal of Universal Computer Science*, Volume 11, Number 10, pp. 1613-1644, 2005
- [12] Alexandre Bergel, Stéphane Ducasse, Oscar Nierstrasz, and Roel Wuyts, *Classboxes: Controlling Visibility of Class Extensions*, In *Computer Languages, Systems and Structures*, Volume 31, Number 3-4, pp. 107-126, May, 2005

## Refereed Articles in International Conferences

- [13] Juan Pablo Sandoval Alcocer, Alexandre Bergel, *Tracking Down Performance Variation Against Source Code Evolution*. In *Proceedings of the 11th Dynamic Languages Symposium (DLS'15)*, October 2015.
- [14] Juraj Kubelka, Alexandre Bergel, Andrei Chis, Tudor Girba, Stefan Reichhart, Romain Robbes, Aliaksei Syrel, *On Understanding How Developers Use the Spotter Search Tool*. In *Proceedings of 3rd IEEE Working Conference on Software Visualization - New Ideas and Emerging Results (VISSOFT-NIER'15)*, September 2015.
- [15] Paloma Oliveira, Marco Tulio Valente, Alexandre Bergel, Alexander Serebrenik, *Validating Metric Thresholds with Developers - an early result-*. In *Proceedings of IEEE International Conference on Software Maintenance and Evolution, early research achievement (ICSME-ERA'15)*, September 2015.



- [16] Leonardo Silva, Marco Tulio Valente, Nicolas Anquetil, Daniel Carlos Hovadick Félix, Alexandre Bergel, Anne Etien, *JSClassFinder: A Tool to Detect Class-like Structures in JavaScript*. In *Proceedings of the Brazilian Conference on Software: Theory and Practice (CBSOFT'15)*, September 2015.
- [17] Alvaro Jose Peralta, Nguyen Tuan Thanh Le, Serge Stinckwich, Chihab Hanachi, Alexandre Bergel, Tuong Vinh Ho, *A Tool for Assessing Quality of Rescue Plans by Combining Visualizations of Different Business Process Perspectives*. In *Proceedings of the 2nd International Conference on Information Systems for Crisis Response And Management - Mediterranean Countries (ISCRAM-med'15)*, October 2015.
- [18] Alexandre Bergel, Vanessa Peña, Tobias Kuhn, *Controlled Experiment to Assess a Test-Coverage Visualization: Lesson Learnt*. In *Proceedings of 8th Seminar Series on Advanced Techniques & Tools for Software Evolution (SATTtoSE 15)*, July 2015.
- [19] Simon Urli, Alexandre Bergel, Mireille Blay-Fornarino, Phillippe Collet, Sébastien Moser, *A Visual Support for Decomposing Complex Feature Models*. In *Proceedings of 3rd IEEE Working Conference on Software Visualization (VISSOFT'15)*, September 2015.
- [20] Rosario Molina, Alexandre Bergel, *Toward a Platform for Visual Debugging*. In *Proceedings of 10th International Workshop on Smalltalk Technologies (IWST'15)*, August 2015.
- [21] Alison Fernandez, Diego Gabriel Nuñez Duran, Alejandro Infante, Alexandre Bergel, *Analyzing Dynamic Information with Spy and Roassal: An Experience Report*. In *Proceedings of 1st International Workshop on Software Analytics (collocated with SANER'15)*, March 2015.
- [22] Leonardo Humberto Silva, Miguel Ramos, Marco Tulio Valente, Alexandre Bergel, Nicolas Anquetil, *Does JavaScript Software Embrace Classes?.* In *Proceedings of 22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (IEEE SANER '15)*, March 2015.
- [23] Javier Luis Canovas Izquierdo, Valerio Cosentino, Belen Rolandi, Alexandre Bergel, Jordi Cabot, *GiLA: GitHub Label Analyzer*. In *Proceedings of Early Research Achievements (ERA) track at SANER'15*, March 2015.
- [24] Alejandro Infante, Alexandre Bergel, *Efficiently Identifying Object Production Sites*. In *Proceedings of Early Research Achievements (ERA) track at SANER'15*, March 2015.
- [25] Juraj Kubelka, Alexandre Bergel, Romain Robbes, *Pitekiin: An Experimental Visual Tool to Assist Code Navigation and Code Understanding*. In *Proceedings of Jornadas Chilenas de Computación 2014 (JCC)*, Octubre 2014.
- [26] Oscar Callaú, Romain Robbes, Éric Tanter, David Röthlisberger, Alexandre Bergel, *Inti: Tracking Performance Issue using a Compact and Effective Visualization*. In *Proceedings of Jornadas Chilenas de Computación 2014 (JCC)*, Octubre 2014.
- [27] Milton Mamani, Alejandro Infante, Alexandre Bergel, *On the Use of Type Predicates in Object-Oriented Software: The Case of Smalltalk*. In *Proceedings of the 10th Dynamic Languages Symposium (DLS'14)*, Octubre 2014.

- [28] Alexandre Bergel, Sergio Maass, Stéphane Ducasse, Tudor Girba, *A Domain-Specific Language For Visualizing Software Dependencies as a Graph*. In *Proceedings of the 2nd IEEE Working Conference on Software Visualization (VISSOFT NIER)*, September 2014.
- [29] Alexandre Bergel, *A tale about software profiling, debugging, testing, and visualization*. In *Proceedings of 7th Seminar Series on Advanced Techniques & Tools for Software Evolution (SATToSE 14)*, July 2014.
- [30] Mathieu Dehouck, Usman Bhatti, Alexandre Bergel, Stéphane Ducasse, *Pragmatic Visualizations for Roassal: a Florilegium*. In *Proceedings of the 8th International Workshop on Smalltalk Technologies (IWST'13)*, September 2013.
- [31] Alejandro Infante, Juan Pablo Sandoval, Alexandre Bergel, *Identifying Equivalent Objects to Reduce Memory Consumption*. In *Proceedings of the 8th International Workshop on Smalltalk Technologies (IWST'13)*, September 2013.
- [32] Alexandre Bergel, Lorenzo Bettini, *Artifact Evaluation (Summary)*. In *Proceedings of the 9th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE'13)*, August 2013.
- [33] Johan Fabry, Alexandre Bergel, *Design Decisions in AspectMaps*. In *Proceedings of 1st IEEE Working Conference on Software Visualization VISSOFT, Tools demo*, 2013.
- [34] Juan Pablo Sandoval Alcocer, Alexandre Bergel, Stéphane Ducasse, Marcus Denker, *Performance Evolution Blueprint: Understanding the Impact of Software Evolution on Performance*. In *Proceedings of 1st IEEE Working Conference on Software Visualization VISSOFT*, 2013.
- [35] Alexandre Bergel, *Interactive Code Execution Profiling*. In *Proceedings of 1st Workshop on Live Programming – Collocated with ICSE'13*, 2013.
- [36] Juan Pablo Sandoval, Alexandre Bergel, *Tracking Performance Failures with Rizel*. In *Proceedings of 13th International Workshop on Principles on Software Evolution – Collocated with ESEC/FSE'13*, 2013.
- [37] Alexandre Bergel, Vanessa Peña, Chris Thorgrímsson, Chung Ho Huang, *Visual Patterns with Profiling Blueprint*. In *Proceedings of 7th Workshop on Dynamic Languages and Applications – Collocated with ECOOP'13*, 2013.
- [38] Alexandre Bergel, Lorenzo Bettini, *Generics and Reverse Generics for Pharo*. In *Proceedings of the 7th International Conference on Software Paradigm Trend (ICSOFT'12)*, July 2012. Best paper award
- [39] \* Jorge Ressia, Alexandre Bergel, and Oscar Nierstrasz, *Object-Centric Debugging*. In *Proceedings of the 34th International Conference on Software Engineering (ICSE 2012)*, June 2012, ACM Press, to appear.
- [40] María Cecilia Bastarrica, Julio A. Hurtado and Alexandre Bergel, *Toward Lean Development in Formally Specified Software Processes*. In *Proceedings of the 18th European System & Software Process Improvement and Innovation Conference (EuroSPI'11)*, June 2011.

- [41] \* Alexandre Bergel, *Counting Messages as a Proxy for Average Execution Time in Pharo*. In *Proceedings of the 25th European Conference on Object-Oriented Programming (ECOOP 2011)*, June 2011, Springer LNCS, to appear.
- [42] Alexandre Bergel, Oscar Nierstrasz, Lukas Renggli, and Jorge Ressa, *Domain-Specific Profiling*. In *Proceedings of the 48th International Conference on Objects, Models, Components, Patterns (TOOLS EUROPE'11)*, June 2011, Springer, to appear, (acceptance rate: 28%).
- [43] Julio Ariel Hurtado Alegría, María Cecilia Bastarrica, and Alexandre Bergel, *Analyzing Software Process Models with AVISPA*. In *Proceedings of the International Conferences on Software and Systems Process (ICSSP'11)*, May 2011, ACM, (acceptance rate: 25%).
- [44] Sebastien Mosser, Alexandre Bergel and Mireille Blay-Fornarino, *Visualizing and Assessing a Compositional Approach of Business Process Design*. In *Proceedings of the International Conferences on Software Composition (SC'10)*, July 2010, LNCS Springer Verlag.
- [45] Alexandre Bergel, Romain Robbes and Walter Binder, *Visualizing Dynamic Metrics with Profiling Blueprints*. In *Proceedings of the 48th International Conference on Objects, Models, Components, Patterns (TOOLS EUROPE'10)*, July 2010, LNCS Springer Verlag.
- [46] Jean-Baptiste Arnaud, Marcus Denker, Stephane Ducase, Damien Pollet, Alexandre Bergel and Mathieu Suen, *Read-Only Execution for Dynamic Languages*. In *Proceedings of the 48th International Conference on Objects, Models, Components, Patterns (TOOLS EUROPE'10)*, July 2010, LNCS Springer Verlag.
- [47] \* Julio Ariel Hurtado Alegria, Alejandro Lagos, Alexandre Bergel and Maria Cecilia Bastarrica, *Software Process Model Blueprints*. In *Proceedings of the International Conference on Software Process (ICSP'10)*, July 2010, Springer Verlag.
- [48] Jannik Laval, Simon Denier, Stéphane Ducasse, Alexandre Bergel, *Identifying cycle causes with Enriched Dependency Structural Matrix*. In *Proceedings of the Proceedings of the 16th Working Conference on Reverse Engineering (WCRE'09)*, October 2009, IEEE.
- [49] Alexandre Bergel, Lorenzo Bettini, *Reverse Generics – Parametrization After the Fact*. In *Proceedings of the 4th International Conference on Software and Data Technologies (ICSOFT 2009)*, July 2009, Communications in Computer and Information Science, Volume 50, Part 3, Springer.
- [50] \* Tom Van Cutsem, Alexandre Bergel, Stéphane Ducasse, Wolfgang De Meuter, *Adding State and Visibility Control to Traits using Lexical Nesting*. In *Proceedings of the 23th European Conference on Object-Oriented Programming (ECOOP 2009)*, July 2009, LNCS.
- [51] Stéphane Ducasse, Damien Pollet, Alexandre Bergel, Damien Cassou, *Reusing Protocol Tests with Traits*. In *Proceedings of the 47th International Conference on Objects, Models, Components, Patterns (TOOLS EUROPE 2009)*, June 2009, LNBIP.
- [52] Alexandre Bergel, Simon Denier, Stéphane Ducasse, Jannik Laval, Fabrice Bellingard, Philippe Vaillergues, Françoise Balmas, Karine Mordal-Manet, *SQUALE – Software QUALity Enhancement*. In *Proceedings of the 13th European Conference on Software Maintenance and Reengineering (CSMR), European Projects Track*, March 2009, IEEE.

- [53] Jan Vraný, and Alexandre Bergel, *The Debuggable Interpreter Design Pattern*, In *Proceedings of the International Conference on Software and Data Technology (ICSOFT 2007)*, Barcelona, Spain July, 2007.
- [54] \* Stéphane Ducasse, Roel Wuts, Alexandre Bergel, and Oscar Nierstrasz, *User-Changeable Visibility: Resolving Unanticipated Name Clashes in Traits*, accepted to *OOPSLA 2007*. New York, NY, USA, ACM Press, 2007, Page 171–190.
- [55] Alexandre Bergel, Stéphane Ducasse, Colin Putney, and Roel Wuyts, *Meta-Driven Browsers: Enabling the next Generation of Development Tools*, Published in the *International Smalltalk Conference 2006*. LNCS, Springer-Verlag, Volume 4406, Page 134-156.
- [56] Alexandre Bergel, Stéphane Ducasse, Oscar Nierstrasz, and Roel Wuyts, *Stateful Traits*, Published in the *International Smalltalk Conference 2006*. LNCS, Springer-Verlag, Volume 4406, Page 66–90.
- [57] Alexandre Bergel, Robert Hirschfeld, Siobhan Clarke, and Pascal Costanza, *Aspectboxes – Controlling the Visibility of Aspects*, In *Proceedings of the International Conference on Software and Data Technology (ICSOFT 2006)*, Setúbal, Portugal September, 2006, Acceptance rate: 12%
- [58] Éric Tanter, Kris Gybels, Marcus Denker, and Alexandre Bergel, *Context-Aware Aspects*, In *Proceedings of the 5th International Symposium on Software Composition (SC 2006)*, Vienna, Austria, March, pp. 227-249, Springer-Verlag, LNCS, 2006
- [59] \* Alexandre Bergel, Stéphane Ducasse, and Oscar Nierstrasz, *Classbox/J: Controlling the Scope of Change in Java*, In *Proceedings of Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA'05)*, New York, NY, USA, ACM Press, pp. 177-189, 2005, acceptance rate: 16%
- [60] Alexandre Bergel, Christophe Dony, and Stéphane Ducasse, *Prototalk: an Environment for Teaching, Understanding, Designing and Prototyping Object-Oriented Languages*, In *Proceedings of ESUG Academic Track 2004*, September, pp. 107-130, 2004
- [61] Alexandre Bergel, Stéphane Ducasse, and Roel Wuyts, *Classboxes: A Minimal Module Model Supporting Local Rebinding*, In *Proceedings of JMLC 2003 (Joint Modular Languages Conference)*, LNCS, Volume 2789, Springer-Verlag, pp. 122-131, 2003, Best Award Paper
- [62] Françoise Baude, Alexandre Bergel, Denis Caromel, Fabrice Huet, Olivier Nano, and Julien Vayssière, *IC2D: Interactive Control and Debugging of Distribution*, In *Proceedings of the Third International Conference, LSSC 2001*, Ed. S. Margenov, J. Wasiewski, and P. Yalamov, Sozopol, Bulgaria, June, LNCS, Volume 2179, Springer-Verlag, pp. 193-200, 2001

## Invited Papers

- [63] Oscar Nierstrasz, Alexandre Bergel, Marcus Denker, Stéphane Ducasse, Markus Gaelli, and Roel Wuyts, *On the Revival of Dynamic Languages*, In *Proceedings of Software Composition 2005*, Ed. Thomas Gschwind and Uwe Aßmann, Volume 3628, LNCS 3628, pp. 1-13, 2005, Invited paper

## Editor

- [64] Alexandre Bergel, Noury Bouraqadi, *Proceedings of the International Workshop on Smalltalk Technologies*, Aug 31, 2009, [ACM Digital Library](#), ISBN:978-1-60558-899-5.
- [65] Alexandre Bergel, Johan Fabry, *Proceedings of the 8th International Conference on Software Composition*, July 2-3, 2008, LNCS 5634, Springer Verlag, ISBN: 978-3-642-02654-6.
- [66] Alexandre Bergel, Wolfgang De Meuter, Stéphane Ducasse, Oscar Nierstrasz, Roel Wuyts, *Proceedings of the Third Workshop on Dynamic Languages and Applications*, February 2008, LNCS 4906, Springer Verlag.

## Workshop Papers

- [67] Alexandre Bergel, *Interactive Code Execution Profiling. Proceedings of 1st Workshop on Live Programming – Collocated with ICSE’13*, 2013
- [68] Juan Pablo Sandoval, Alexandre Bergel, *Tracking Performance Failures with Rizel. Proceedings of 13th International Workshop on Principles on Software Evolution, collocated with ECOOP’13*
- [69] Alexandre Bergel, Vanessa Peña, Chris Thorgrímsson, Chung Ho Huang, *Visual Patterns with Profiling Blueprint. Proceedings of 7th Workshop on Dynamic Languages and Applications, collocated with ECOOP’13*
- [70] Alexandre Bergel, Vanessa Peña, Juan Pablo Sandoval, *The Hidden Face of Execution Sampling, In Proceedings of the 1st Smalltalk Direction Workshop, Collocated with STIC, March 2012*
- [71] Stephane Ducasse, Manuel Oriol, Alexandre Bergel, *Challenges to support automated random testing for dynamically typed languages, In Proceedings of the 3rd International Workshop on Smalltalk Technologies (IWST’11), Collocated with ESUG, June 2011*
- [72] Santiago Vidal, Claudia Marcos, Alexandre Bergel, Gabriela Arevalo, *Memoization Aspects: a Case Study, In Proceedings of the 3rd International Workshop on Smalltalk Technologies (IWST’11), Collocated with ESUG, June 2011, PDF*
- [73] Ricardo Jacas, Alexandre Bergel, *Klotz: An Agile 3D Visualization Engine, In Proceedings of the 3rd International Workshop on Smalltalk Technologies (IWST’11), Collocated with ESUG, June 2011*
- [74] Vanessa Pena Araya, Alexandre Bergel, *Test Coverage With Hapao, In Proceedings of the 5th Workshop on Dynamic Languages and Applications (Dyla’11), Collocated with TOOLS EUROPE 2011, June 2011*
- [75] Alexandre Bergel, Mariano Abel Coca, Gabriela Arevalo, Dale Henrichs, Jannik Laval, *Memory Profiling Blueprint, Presented at 4th Smalltalk Conference (Smalltalks’10), November, 2010*
- [76] Alexandre Bergel, Lorenzo Bettini, *Generics and Reverse Generics for Dynamically Typed Languages, Presented at the Smalltalk Conference (Smalltalks’10), November, 2010*

- [77] *Alexandre Bergel, Felipe Bañados, Romain Robbes, David Roethlisberger*, SPY: A Flexible Code Profiling Framework, Presented at the 4th Smalltalk Conference (Smalltalks'10), *November, 2010*
- [78] *Alexandre Bergel*, Agile Code Profiling Visualization, *In Proceedings of the 4th Workshop on Dynamic Languages and Applications (DYLA'10), June, 2010*,
- [79] *David Röthlisberger, Oscar Nierstrasz, Alexandre Bergel, Stéphane Ducasse*, Tackling software navigation issues of the Smalltalk IDE, *In Proceedings of the International Workshop on Smalltalk Technologies, August, 2009*,
- [80] *Alexandre Bergel, Stéphane Ducasse, Jannik Laval, Romain Peirs*, Enhanced Dependency Structure Matrix for Moose, *In Proceedings of the 2nd FAMOOSr Workshop, October, 2008*,
- [81] *Jannik Laval, Alexandre Bergel, Stéphane Ducasse*, Assessing the Quality of your Software with MoQam, *In Proceedings of the 2nd FAMOOSr Workshop, October, 2008*,
- [82] *Alexandre Bergel*, Importing Java Code into FAMIX, *In Proceedings of the 2nd FAMOOSr Workshop, October, 2008*,
- [83] *Alexandre Bergel, Claus Lewerentz, Liam O'Brien*, Classboxes: Supporting Unanticipated Variation Points in the Source Code, *In Proceedings of the 2nd Workshop on Aspect-Oriented Product Line Engineering (AOPLE), October, 2007*
- [84] *Alexandre Bergel*, FacetS: First Class Entities for an Open Dynamic AOP Language, *In Proceedings of the Open and Dynamic Aspect Languages Workshop, March, 2006*
- [85] *Alexandre Bergel, Stéphane Ducasse, and Roel Wuyts*, The Classbox Module System, *In Proceedings of the ECOOP '03 Workshop on Object-oriented Language Engineering for the Post-Java Era, July, 2003*
- [86] *Alexandre Bergel, and Markus Denker*, Prototyping Languages, Related Constructs and Tools with Squeak, *In Proceedings of the ECOOP '06 Workshop on Revival of Dynamic Languages, July, 2006*

## **Refereed Articles in National Journals**

- [87] *Alexandre Bergel and Stéphane Ducasse*, *Scoped and Dynamic Aspects with Classboxes*, In *RSTI – L'Objet (programmation par aspects)*, Volume 11, Number 3, pp. 53–68, 2005
- [88] *Alexandre Bergel*, *Classboxes – Controlling Visibility of Class Extensions*, In *it- Information Technology*, Number 4, 2007

## **Refereed Articles in National Conferences**

- [89] *Jan Kurs, Jan Vraný, and Alexandre Bergel*, *Supporting Language Interoperability by Dynamically Switched Behaviors*, In *Proceedings of Databases, Texts, Specifications, and Objects (DATSEO'11)*, Písek, Czech Republic

- [90] Julio A. Hurtado, María Cecilia Bastarrica, Alexandre Bergel, *Analyzing the Scrum Process Model with AVISPA*, In *Proceedings of XXIX International Conference of the SCCC*, Antofagasta, Chile, 2010.
- [91] Alexandre Bergel, *Contrôler la visibilité des aspects avec Aspectboxes*, In *Proceedings of LMO 2009*, Nancy, France.
- [92] Jannik Laval, Alexandre Bergel, Stéphane Ducasse, and Romain Piers, *Matrice de dépendances enrichie*, In *Proceedings of LMO 2009*, Nancy, France.
- [93] Florian Minjat, Alexandre Bergel, Pierre Cointe, and Stéphane Ducasse, *Mise en symbiose des traits et des classboxes : Application à l'expression des collaborations*, In *Proceedings of LMO 2005*, Bern, Switzerland, Volume 11, pp. 33-46.
- [94] Alexandre Bergel and Stéphane Ducasse, *Supporting Unanticipated Changes with Traits and Classboxes*, In *Proceedings of Net.ObjectDays (NODE'05)*, Erfurt, Germany, September, pp. 61-75, 2005
- [95] Alexandre Bergel, *Controlling the Visibility of Changes in Java with Classboxes*, In *Proceedings of Objekty Conference 2006* Prague, Czech Republic, November pp. 47-49, 2006. Short paper, invited speaker.

## PhD thesis

- [96] Alexandre Bergel, *Classboxes — Controlling Visibility of Class Extensions*, Ph.D. Thesis, University of Berne, 2005, ISBN-13: 978-3639165180, ISBN-10: 3639165187, Publisher: VDM Verlag

## Other Publications

- [97] Éric Tanter, Kris Gybels, Marcus Denker, and Alexandre Bergel, *Context-aware aspects*, University of Chile, Number TR/DCC-2005-12, 2005
- [98] Alexandre Bergel, Stéphane Ducasse, Oscar Nierstrasz, and Roel Wuyts, *Classboxes: Controlling Visibility of Class Extensions*, Institut für Informatik, Number IAM-04-003, June, 2004
- [99] Stéphane Ducasse, Alexandre Bergel, François Schnell, Noury Bouraqadi, and Serge Stinckwich, *Des idées puissantes dans la classe – Utilisation de Squeak pour l'amélioration de l'apprentissage des mathématiques et des sciences (traduction de Powerful Ideas in the Classroom)*
- [100] Alexandre Bergel, Stéphane Ducasse, Colin Putney, and Roel Wuyts, *The Omnibrowser Reference*, 2007
- [101] Alexandre Bergel, *Beauty and the Beast: Translating Smalltalk to Java*, 2008, Unpublished

## 6 Software

I am have authored or co-authored several software. Some are available under the MIT Licence on

- <http://www.smalltalkhub.com/#!/~ObjectProfile>
- <http://www.smalltalkhub.com/#!/~abergel>

## 7 Teaching

In 2009 I incorporated the Department of Computer Science of the University of Chile as Assistant Professor.

### 7.1 Lecturing since 2009

A course comprises 30 lectures of 1:30 hours, 2 per week. An *encuest* is an evaluation done by the students. A mark is given by the students to the professor in charge of the class. It ranges between 1 and 7, 7 is the maximum.

- March2011-June2012 – CC3002 - Programming with Java / Seminario Calidad y Evolución de Software.
- November2011-January2012 – CC6403 - Software Evolution and Quality / Seminario Calidad y Evolución de Software. Encuesta: 6.3
- November2011-January2012 – CC5401 - Software Engineering / Seminario Calidad y Evolución de Software. Encuesta: 5.1
- August-November2010 – CC68S - Software Evolution and Quality / Seminario Calidad y Evolución de Software. Encuesta: 6.0
- August-November2010 – CC68S - Software Evolution and Quality / Seminario Calidad y Evolución de Software. Encuesta: 6.0
- August-November2010 – CC51A - Software Engineering / Seminario Calidad y Evolución de Software. Encuesta: 5.9
- March-July2010 – CC3002 - Programming with Java / Seminario Calidad y Evolución de Software. Encuesta: 5.7
- March-July2010 – CC51A - Software Engineering / Seminario Calidad y Evolución de Software. Encuesta: 6.1
- August-November2009 – CC68S - Software Evolution and Quality / Seminario Calidad y Evolución de Software. Encuesta: 6.7



## 7.2 Guest lecturer

- 4 classes on Software Quality for the company MAS - Telefonica (October- December2010)
- Experiencias de Investigacion en el DCC, University of Chile, Chile. Title: *The Good, the Bad and the Ugly: Personal Experience in Research*. Contact: Claudio Gutierrez. October 14, 2009
- Université de Nice, Polytech' Nice-Sophia, France. Title: *Assessing code quality with Moose*. Contact: Mireille Blay-Fornarino, Philippe Salvan. December 18, 2009

## 7.3 Thesis and report review

- Master with Sergio F. Ochoa. Title: *Infraestructura de Trabajo Colaborativo Movil para Inspeccion Tecnica de Obras*
- Professor co-guia de Roberto Riquelme Torres with Prof. - Agustín Villena. Title: *Una Herramienta Flexible para Implementación de Tableros Kanban Virtuales*
- Ph.D - Valeria Paz Herskovic Maida, supervisor: José A. Pino Urtubia, Sergio F. Ochoa De-lorenzi - 2010 Title: *Evaluation of mobile shared workspaces to improve their support for collaboration*
- Engineering - Luis Avello Huala, supervisor: Luis Guerrero - December 30, 2009 - Title: *Modelo de Comunicación Punto a Punto para Aplicaciones Colaborativas en Dispositivos Móviles*

## 7.4 Lecturing before 2009

Note: Lab means to be in charge of practical works (laboratory session). SS means Summer Semester and WS Winter Semester. "Level" refers to the level of the attending students in years.

UQAM refers to Université du Québec à Montréal (Canada).

UA refers to University of Adelaide (Australia).

UNSA refers to Université de Nice-Sophia Antipolis (France).

Resp. refers to responsibility.

In charge of lectures and occasionally some practical works (lab session).

Year	University	Lecture Title	Hours	Stud.	Resp.	Level
Nov. 2008	Summer School, Punta arenas (Chile)	<b>Object-Oriented Programming with Smalltalk, Modularity Beyond Classes(web)</b>	2	40	Lecture	master
Jan. 2007	University of Bonn (Germany)	<b>Controlling the Scope of Change in Java(web)</b>	2	30	Lecture	master
Nov. 2006	University of Prague (Czech R.)	<b>Web Development with the Seaside Framework</b>	6,5	100	Lecture+ Lab	master
Nov. 2006	University of Anancy (France)	<b>Functional Language Interpretation in Smalltalk</b>	2	25	Lecture	master
Dec. 2004	University of Bonn (Germany)	<b>Dynamic AOP with Dynamic Classboxes and Friends(web)</b>	2	30	Lecture	master
Nov. 2004	UQAM (Canada)	<b>Modularity in Programming Languages</b>	1.5	20	Lecture	master
Apr. 2003	University of Tagoviste (Romania)	<b>Smalltalk</b>	15	40	Lecture + Lab	bachelor
Sep. 2001	UA (Australia)	<b>Functional Interpreter in an Object-Oriented Environment</b>	2	20	lecture	master
Feb. 2001	UNSA (France)	<b>Outils pour projet (CVS, SVN, Makefile)</b>	8	70	Lecture + Lab	bachelor

## 7.5 Assistant

Mainly in charge of practical work (lab session) and occasionally of lectures.

SD refers to Prof. Stéphane Ducasse. ON refers to Prof. Oscar Nierstrasz. RH refers to Robert Hirschfeld.

BE refers to University of Bern. NE refers to Université de Neuchâtel. PO refers to University of Potsdam.

SS refers to Summer Semester and WS refers to Winter Semester.

Year	University	Professor	Lecture Title	Hours	Students	Level
SS 07	PO	RH	<b>Software Architecture</b>	8	50	bachelor
SS 05	BE	SD	<b>Advanced Design Labs</b>	40	16	master
WS 04/05	BE	SD	<b>Smalltalk</b>	30	20	master
SS 04	BE	SD	<b>Scheme</b>	30	20	master
WS 03/04	BE	SD	<b>Interpreting Object-Oriented Models</b>	30	20	master
SS 03	BE	SD	<b>Advanced Object-Oriented Design With Smalltalk</b>	40	20	master
SS 02	NE	SD	<b>Programmation objet</b>	40	5	2nd Year
SS 02	BE	ON	<b>Object-Oriented Programming with Java</b>	30	90	1st Year

- Interpreting Object-Oriented Models: Presented various objects models such as prototype languages, mixins and classes.

## 8 Supervision

- summer 2012 Guided work of Pablo Estefó during the semester summer 2012 at the University of Chile.  
*Title:* “Reorganizing and refactoring unit tests with TestSurgeon”. Pablo participated at the ACM Student Research Competition organized at ICSE’12. He arrived first in the undergrad category\*. In addition, he won the Sigsoft scholarships.
- summer 2011 Guided work of Vanessa Peña during the semester summer 2011 at the University of Chile.  
*Title:* Test Blueprint. Vanessa participated at the ACM Student Research Competition organized at ICSE’11. She arrived second<sup>†</sup> with Hapao<sup>‡</sup>. In addition, she won two scholarships: ACM Women and Sigsoft. Vanessa won the grand final
- winter 2010 Guided work of Felipe Bañados Schwerter during the semester winter 2010 at the University of Chile.  
*Title:* Visualizing code profiling difference
- summer 2006 Supervision of Thomas Ducrocq (University of Rennes)’s student project (Trinity College Dublin).  
*Title:* A component model for embedded device, and application to the Lego Mindstorms.
- winter 2005 Supervision of Niklaus Haldimann’s student project (University of Berne).  
*Title:* A Sophisticated Programming Environment to Cope with Scoped Changes.
- summer 2005 Co-Supervision with Stéphane Ducasse of Damien Cassou’s internship Thesis (University of Berne).  
*Title:* Smallwiki 2.
- 2004-05 Co-Supervision with Stéphane Ducasse of Andreas Hosbach’s Master Thesis (University of Berne).  
*Title:* Learning from Cell.
- 2004 Co-Supervision with Stéphane Ducasse of Florian Minjat’s Master Thesis (University of Berne).  
*Title:* Symbiosis of Classboxes with Traits. Running implementation and a paper at LMO 05.

## 9 Languages

French, English, Spanish, German

## 10 Sport

I practice Tae Kwon Do ITF, my sport CV is available on: <http://bit.ly/SportCV>

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\*<http://src.acm.org/winners.html>

†<http://src.acm.org/winners.html>

‡<http://hapao.dcc.uchile.cl>