

Dr. Alexandre Bergel

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

Keywords: Software Engineering, Object-Oriented Programming, Language Design, Aspects-Oriented Programming, Reflection, Modules, Teaching OO, Mixins, Traits, Classboxes, Scheme, Smalltalk, Java, Ruby, C#, Embedded systems, Context-Oriented Programming.

Since May 2009, I am Assistant Professor at the University of Chile. I am also associate researcher at INRIA, France.

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: Classboxes – 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/).

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, 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)

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 for:

- *Software Composition 2009*
<http://www.2009.software-composition.org>
- *International Workshop on Smalltalk Technologies 2009*
<http://www.esug.org/Conferences/2009/InternationalWorkshop>

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

- *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.
- *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.
- *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.icssoft.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.
- *SC 2008*: 7th International Symposium on Software Composition – 29 - 30 mars 2008, Budapest, Hungary.
www.2008.software-composition.org.
- *ICSOFT 2007*: 2nd International Conference on Software and Data Technologies – July 22-25, 2007, Barcelona, Spain.
<http://www.icssoft.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.icssoft.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:

- Software: Practice and Experience (SPE-08-0086). Editor: Nigel Horspool.
- 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)
- ACM Reviewer (#7802) for Computing Reviews (<http://www.reviews.com>).
- Transaction on Software Engineering (TSE-0024-0107). Editor: Harold Ossher.
- Transaction on Software Engineering (TSESI-2008-03-0115). *Special Issue on Software Language Engineering*, Guest editors: Jean-Marie Favre, Dragan Gasecić, 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* :
 - * 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)

External project reviewer.

- 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). Slides available on <http://bergel.eu/presentations.html>

Organization and Participation.

- 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
- 46th Tools Europe 2008, co-workshop chair: 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), 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*.

Consulting.

- *America XXI*, Santiago (Chile), October 6, 2009. Contact: Sebastián Pastine Sepúlveda, www.americaxxi.cl
- *NIC Chile*, Santiago (Chile), September 15, 2009. Contact: Jose Urzua, 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>

Visited Research Labs and Given Talks. Some of my presentations may be seen online on www.slideshare.net/bergel

- *SPIN Chile* - Evaluación de la evolución y Calidad del Software con Moose. September 9, 2009. Contact : www.spin.cl.
- *University of York, England*. October 24, 2009. Contact : Dr. Manuel Oriol.
- *Club Qualimétrie (Paris, France)*. September 23, 2009. Contact : 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 Kniessel.
- *Fakulta elektrotechnická, České vysoké učení technické v Praze, (University of Prague), (Czech Republic)*. November 21-23, 2006. Contact : Juraj Kubelka.
- *University of Limerick (Irlande)*. 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.
- *Univeristy 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
- *Université du Québec à Montreal (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.

- Winner of the international Ernst Denert Software Engineering Award 2006 (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)
- 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 - *CoReA: Comprehension and Remodularization of Applications based on Aspects, Classboxes and Traits*.
International coordinator: Alexandre Bergel, *national coordinators:* Gabriela Beatriz Arévalo (Universidad Nacional de La Plata - Argentina); Johan Fabry (Universidad de Chile - Chile).
Public funding: 30 744 euros. Beginning-end: March 2009-December 2010.
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 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/publications.html).

Refereed Articles in International Journals

- [1] Alexandre Bergel, *FlowTalk: Language Support for Long-Latency Operations in Embedded Devices*, Accepted for publication to *Transaction on Software Engineering*, IEEE
- [2] 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 0.467
- [3] 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 0.467

- [4] Alexandre Bergel, Stéphane Ducasse, and Oscar Nierstrasz, *Analyzing Module Diversity*, In *Journal of Universal Computer Science*, Volume 11, Number 10, pp. 1613-1644, 2005
- [5] 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 National Journals

- [6] 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
- [7] Alexandre Bergel, *Classboxes – Controlling Visibility of Class Extensions*, In *it- Information Technology*, Number 4, 2007

Refereed Articles in International Conferences

- [8] 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.
- [9] 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, LNCS.
- [10] 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.
- [11] 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.
- [12] 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.
- [13] 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.
- [14] Stéphane Ducasse, Roel Wuyts, 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.
- [15] 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.

- [16] 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.
- [17] 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%
- [18] 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
- [19] 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%
- [20] 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
- [21] 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
- [22] 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

Refereed Articles in National Conferences

- [23] Alexandre Bergel, *Contrôler la visibilité des aspects avec Aspectboxes*, In *Proceedings of LMO 2009*, Nancy, France, 2009,
- [24] Jannik Laval, Alexandre Bergel, Stéphane Ducasse, and Romain Piers, *Matrice de dépendances enrichie*, In *Proceedings of LMO 2009*, Nancy, France, 2009,
- [25] 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, 2005
- [26] 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
- [27] 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.

Invited Papers

- [28] 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

- [29] 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.
- [30] 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

- [31] Alexandre Bergel, Stéphane Ducasse, Jannik Laval, Romain Peirs, *Enhanced Dependency Structure Matrix for Moose*, In *Proceedings of the 2nd FAMOOSr Workshop*, October, 2008,
- [32] Jannik Laval, Alexandre Bergel, Stéphane Ducasse, *Assessing the Quality of your Software with MoQam*, In *Proceedings of the 2nd FAMOOSr Workshop*, October, 2008,
- [33] Alexandre Bergel, *Importing Java Code into FAMIX*, In *Proceedings of the 2nd FAMOOSr Workshop*, October, 2008,
- [34] 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 (AOPL)*, October, 2007
- [35] Alexandre Bergel, *FacetS: First Class Entities for an Open Dynamic AOP Language*, In *Proceedings of the Open and Dynamic Aspect Languages Workshop*, March, 2006
- [36] 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
- [37] Alexandre Bergel, and Marcus Denker, *Prototyping Languages, Related Constructs and Tools with Squeak*, In *Proceedings of the ECOOP '06 Workshop on Revival of Dynamic Languages*, July, 2006

PhD thesis

- [38] 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

- [39] Éric Tanter, Kris Gybels, Marcus Denker, and Alexandre Bergel, *Context-aware aspects*, University of Chile, Number TR/DCC-2005-12, 2005
- [40] Alexandre Bergel, Stéphane Ducasse, Oscar Nierstrasz, and Roel Wuyts, *Classboxes: Controlling Visibility of Class Extensions*, Institut für Informatik, Number IAM-04-003, June, 2004
- [41] 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)*
- [42] Alexandre Bergel, Stéphane Ducasse, Colin Putney, and Roel Wuyts, *The Omnibrowser Reference*, 2007
- [43] Alexandre Bergel, *Beauty and the Beast: Translating Smalltalk to Java*, 2008, Unpublished

5 Software

I am the author of the following software programs:

title	summary	size	# download
Mondrian	Visualization engine for reverse engineering purpose (I authored the port from Visualworks to Pharo)	> 6500 LOC	2187
CAnalyzer	C importer for reverse engineering purpose	> 1000 LOC	247
Athena Smalltalk	Smalltalk virtual machine written in Java	> 1353 LOC	1200
SmalltalkLite	Extensible smalltalk-like language	2552 LOC	-
SmallScheme	Scheme interpreter written in Smalltalk for teaching purpose	1314 LOC	370
Flowtalk	Smalltalk dialect for wireless sensor networks	> 3000 LOC	-
FacetS	Aspects for dynamic programming language	-	200
Classbox/J	Classbox compiler for Java	-	206

Each software has a dedicated web page accessible from www.bergel.eu/software.html
Webpages:

- Mondrian: www.squeaksource.com/Mondrian.html
- Athena: www.squeaksource.com/Athena.html
- SmallScheme: www.squeaksource.com/Scheme.html

- FacetS: www.squeaksource.com/FacetS.html
- Classbox/J: www.iam.unibe.ch/scg/Research/Classboxes

Furthermore, I am an active member of Pharo, a new Smalltalk-like dialect open source: www.pharo-project.org (> 15000 download according to the INRIA gforge (<https://gforge.inria.fr/top/toplist.php?type=downloads>))

6 Teaching

In 2009 I received the title of Assistant Professor at the University of Chile.

6.1 Lecturing from 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.

- August-November2009 – CC68S - Software Evolution and Quality / Seminario Calidad y Evolución de Software. 6th year, last year before the master. Encuesta: 6.7

6.2 Guest lecturer

- 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

6.3 Thesis review

- Luis Avello Huala, supervisor: Luis Guerrero - December 30, 2009 - Title: *Modelo de Comunicación Punto a Punto para Aplicaciones Colaborativas en Dispositivos Móviles*

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

6.5 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	Software Architecture	8	50	bachelor
SS 05	BE	SD	Advanced Design Labs	40	16	master
WS 04/05	BE	SD	Smalltalk	30	20	master
SS 04	BE	SD	Scheme	30	20	master
WS 03/04	BE	SD	Interpreting Object-Oriented Models	30	20	master
SS 03	BE	SD	Advanced Object-Oriented Design With Smalltalk	40	20	master
SS 02	NE	SD	Programmation objet	40	5	2nd Year
SS 02	BE	ON	Object-Oriented Programming with Java	30	90	1st Year

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

7 Supervision

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.

8 References

Dr. Gilad Bracha, Distinguished Engineer at Cadence Design Systems. Previously, distinguished engineer at Sun Microsystems. Java Language architect and maintainer and co-author of the Java Language Specification and the Java Virtual Machine.

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9 Languages

- French (fluent)
- English (fluent)
- Spanish (fluent)
- German (good)