



UNIVERSITÀ  
di VERONA

Dipartimento  
di INFORMATICA

Verona, 7 giugno 2018

Università degli Studi di Verona	Divisione Affari Generali
	Albo Ufficiale
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**ELEZIONE DEL DIRETTORE DEL DIPARTIMENTO  
PER IL TRIENNIO ACCADEMICO 2018/2019 – 2020/2021**

Il Decano del Dipartimento, Presidente della Commissione Elettorale,

- Accertato che per l'elezione del Direttore di Dipartimento sono state presentate nei termini (entro le ore 12:00 del 07.06.2018) le seguenti candidature:
  - Prof. Roberto Giacobazzi, professore ordinario S.S.D. INF/01 – Informatica
- Verificata la regolarità della candidatura presentata ed accertatane l'ammissibilità alla successiva procedura elettorale

**DICHIARA**

Validamente presentata la candidatura del Prof. Roberto Giacobazzi, disponendone l'immediata comunicazione a tutto il corpo elettorale, come sotto indicato:

**ELENCO CANDIDATURE**

Nominativo	Qualifica e SSD	Allegati
Prof. Roberto Giacobazzi	Professore Ordinario SSD INF/01 Informatica	Curriculum Vitae e Programma



COMMISSIONE ELETTORALE

Il Presidente  
Prof. Gino Mariotto



Verona, 05/06/2018

Al Decano del Dipartimento di Informatica  
— Prof. Gino Mariotto  
SEDE

**OGGETTO: Candidatura alla direzione del Dipartimento di Informatica**

Con questa lettera desidero porre la mia candidatura alla direzione del Dipartimento di Informatica dell'Università degli Studi di Verona.

Ho maturato negli anni una profonda conoscenza delle dinamiche universitarie sia a livello internazionale che nazionale. L'esperienza come Delegato alla Didattica prima ed alla Ricerca poi dal 2000 al 2006, seguita dalla esperienza come (ultimo) Preside della Facoltà di Scienze MM.FF.NN. dal 2006 al 2012 e successivamente come Conigliere di Amministrazione del nostro Ateneo, mi ha fatto conoscere bene la nostra Università ed il contesto locale e nazionale in qui essa è immersa. Negli ultimi 5 anni ho trascorso molto tempo all'estero visitando centri di ricerca ed università in Europa, Nord America ed Australia. Spero che questa mia esperienza possa essere utile per la futura crescita del nostro dipartimento.

In questi ultimi anni il Dipartimento è cresciuto molto ed ora è una delle realtà tra le più vivaci ed attive dell'Ateneo. Di questo dobbiamo ringraziare il Direttore uscente per l'ottimo lavoro svolto!

Se venissi eletto Direttore le mie priorità saranno:

- Consolidamento delle linee di sviluppo emerse durante la attuale gestione. Un importantissimo risultato è stato ottenuto con l'approvazione del Progetto di Eccellenza che proietta il nostro dipartimento tra i primi in Italia nei settori dell'ICT. Questo progetto deve essere motivo di crescita per tutto il Dipartimento, ed abbracciare tutte le sue anime, dalla informatica alla matematica alla fisica.
- Avvio di una riflessione sui futuri ulteriori sviluppi del Dipartimento. Chi mi ha conosciuto come Preside sa che sono solito costruire e condividere progetti ambiziosi. Durante questi 5 anni trascorsi in gran parte all'estero ho osservato l'enorme potenziale che alcune aree hanno e su cui è importante poter essere al più presto competitivi ed aggressivi sul mercato della conoscenza: Data Science, Artificial Intelligence, Robotics, Bioinformatics and Bio-Medical technologies, per menzionarne alcune.
- Consolidamento delle aree esistenti attraverso un piano che preveda una distribuzione delle risorse che incrementi, sostenga e sviluppi anche le aree con criticità. Avere pochissime aree



eccellenti non ci aiuta a crescere come comunità scientifica. È necessario sostenere chi ha risultati eccellenti e dare risorse a chi ha il potenziale di esserlo attraverso un sistema di ripartizione condiviso e premiante.

- Sviluppo delle dotazioni del Dipartimento sia per quel che concerne i laboratori di ricerca che gli spazi per la didattica e la creazione di spin-off. Questo anche in coordinamento con l'Ateneo e le istituzioni finanziarie cittadine, ora particolarmente sensibili alla nostra realtà.
- Incentivare le attività che portino visibilità soprattutto internazionale al nostro Dipartimento attraverso misure specifiche per realizzare in Verona eventi scientifici importanti ed invitare colleghi stranieri presso il nostro Ateneo.
- Ripristino dei ruoli peculiari del personale docente e tecnico amministrativo. È necessario che queste due figure fondamentali per la crescita armonica dell'università cooperino per una finalità comune: far sì che l'Ateneo sia più produttivo in termini di buona ricerca e buona didattica. Ottenere questo richiede un lavoro profondo di semplificazione di procedure e processi che non può riguardare solo il nostro Dipartimento ma l'Intero Ateneo. In questo senso intendo dedicarmi con impegno nelle sedi appropriate affinché il personale docente torni ad impiegare il suo tempo in università per lo studio, la ricerca e l'incontro con gli studenti. Al tempo stesso farò il possibile perché il personale tecnico amministrativo viva in modo gratificante ed appagante il lavoro svolto senza che questo venga continuamente sconvolto da assurdi cambiamenti o rimescolamenti che nulla hanno a che fare con lo scopo primario della Istituzione: far sì che l'Ateneo sia più produttivo in termini di buona ricerca e buona didattica!
- Coinvolgere nelle decisioni il Dipartimento nel suo complesso. Chi mi ha conosciuto come Preside sa come lavoro e come gestisco le dinamiche che portano alle decisioni, dalle più semplici alle più importanti e difficili. La Riforma della Università conseguente alla Legge 240 e successivi regolamenti hanno sconvolto l'assetto consolidato nei decenni della Università italiana, ridisegnando il sistema di potere degli atenei. È tuttavia possibile guadagnare spazi di influenza anche con il nuovo assetto, facendo leva sulla unitarietà di didattica e ricerca e lavorando in sinergia con i Direttori di Dipartimento, come un tempo si lavorava con i Presidi di Facoltà. Il Direttore deve svolgere una politica attiva affinché i bisogni del personale Docente e Tecnico Amministrativo siano presi in considerazione e le criticità risolte. Questo è particolarmente urgente ora, nell'imminente momento di transizione che coinciderà con l'elezione del futuro nuovo Rettore.

Sono disponibile a svolgere questo incarico con il massimo dell'impegno e con la massima disponibilità, accogliendo i suggerimenti di tutti, con l'unico scopo di far crescere il nostro Dipartimento in modo armonioso, rendendolo un luogo ove tutti abbiano piacere ed orgoglio di lavorare.

Prof. Roberto Giacobazzi

# Curriculum Vitæ of Roberto Giacobazzi

April 19, 2018

## Curriculum Vitæ in short

**Personal data:** Prof. Roberto Giacobazzi, born in Modena (Italy), November 6th, 1964. Nationality: Italian.

**Address:** Dipartimento di Informatica, Università di Verona, Strada Le Grazie 15, Verona Italy.

Ph.: (+39) 340 789 0128.

E-mail: [roberto.giacobazzi@univr.it](mailto:roberto.giacobazzi@univr.it).

Web: <http://profs.sci.univr.it/~giaco>.

### Education:

(1993) PhD in Computer Science (CS), U. of Pisa, Italy;

(1988) Master in CS, U. of Pisa.

### Past & current positions:

(2000–) Full Professor in CS at the U. of Verona and head of the *Static Analysis* group;

(1998-2000) Associate Professor in CS at U. of Verona;

(1995-1998) Assistant Professor in CS at the U. of Pisa;

(1993-1995) Post-doc at the Lab. d'Informatique (LIX), Ecole Polytechnique (FR).

### Research interests:

I am mostly interested in abstract interpretation and formal methods with applications in any area of computer science, including static program analysis, semantics, program transformation and optimisation, language-based security, code protection, code obfuscation, verification, and model checking. I am author of more than 90 publications in international journals and conferences. In Google Scholar: 2784 citations, H-index 30, i10-index 60. The paper that has most marked my career is:

R. Giacobazzi, F. Ranzato, and F. Scozzari. Making abstract interpretation complete. *J. of the ACM*, 47(2):361-416, March 2000.

**Supervision:** I have been adviser of 17 PhD students at the following institutions: Université de Paris VII, U. of Siena, Ben-Gurion U., U. of Padova, and U. of Verona. The most representative ones in terms of career follow-up are: Dr. F. Scozzari (now Associate Prof. U. of Chieti-Pescara), Dr. S. Genaim, (now Assistant Prof. Universidad Complutense de Madrid), and Prof. F. Ranzato (now Associate Prof. U. of Padova), Prof. I. Mastroeni (now Associate Prof. U. of Verona), Dr. D. Zanardini (now Assistant Prof. at UPM), Dr. M. Dalla Preda (now Tenure-Track Associate Prof. U. of Verona), Dr. G. Scardoni (now Post-Doc U. of Verona), Dr. E. Visentini (Senior SW Eng. at Reply), Dr. Durica Nikolić (Post-Doc at ETH Zürich).

**Teaching (a selection):**

- (2010-) Professor of *Semantics based code protection* at the 1st, 2nd, 3rd, 5th, 6th, 7th, and 8th ACM International Summer School on Information Security and Protection — ISSISP;  
(2008) Professor for the PhD course on *Software Protection* at UCM (U. Complutense de Madrid);  
(1999-) Professor of *Computability and Complexity, Static Analysis and Code Protection, Programming Languages*, and *Malware Analysis* at the U. of Verona.

**Scientific organisation (a selection):**

- (2018) Chair of the Shonan Meeting No. 115: *Intensional and extensional aspects of computation: From computability and complexity to program analysis and security*, Shonan Village Japan, Jan. 21-25, 2018.  
(2017) Program Chair of the N40AI – *Next 40 Years of Abstract Interpretation* workshop co-located with POPL 2017 in Paris, Jan. 21st, 2017 and chair and organiser of the *40 Years of Abstract Interpretation – An Interview with Patrick Cousot*, at POPL 2017.  
(2012-2015) Steering Committee of *ACM Symp. on Principles of Programming Languages (POPL)*.  
(2014) Chair of the Dagstuhl Seminar 14241 on *Challenges in analysing executables: Scalability, Self-modifying code and Synergy*, June 9–13, 2014.  
(2013) Program Chair of *14th Verification, Model Checking, and Abstract Interpretation (VMCAI'13)*.  
(2013) General Chair of *40th ACM Symposium on Principles of Programming Languages (POPL'13)*.  
(2011) Editor of the Special Issue on the *3rd Int. Workshop on Programming Language Interference and Dependence - PLID 2007*, in *Mathematical Structures in Computer Science* 61(6), 2011.  
(2008) Chair of the *30 Years of Abstract Interpretation (30YAI)* workshop in honor of Patrick Cousot, January 09, joint with POPL 2008, San Francisco USA.  
(2008-2014) Editor of the *Central European J. of Computer Science*, by Springer-Verlag.  
(2007) Editor of the Special Issue of *11th Static Analysis Symp., Sci. of Comp. Prog.* 64(1):1-184, 2007.  
(2004) Program Chair of the SAS2004, 11th Int. Static Analysis Symp., and General Chair of 6th ACM Int. Conf. on Principles and Practice of Declarative Programming (ACM-PPDP'04), 20th ACM Workshop on Partial Evaluation and Semantics-Based Program Manipulation (ACM-PEPM'04), Int. Symp. on Logic-based Program Synthesis and Transformation (LOPSTR'04). Verona, Italy.  
(1993-2016) Steering Committee of *The Static Analysis Symposium (SAS)*.

**Institutional responsibilities:**

- (2013-2014) Member of the Board of Directors of the U. of Verona.  
(2006-2012) Dean of the College of Science of the U. of Verona and member of the Academic Senate.  
(2004-2006) Pro-Rector for Research at the U. of Verona.  
(2004-2006) Member of the Evaluation Board of the U. of Verona.  
(2001-2004) Pro-Rector for Education and E-learning at the U. of Verona.

**Commissions of trust:**

- (2012-2014) Chair of the National Scientific Qualification committee for professorship in Computer Science in Italy (5 members, two years appointment). 898 candidates in 2012 and 182 in 2013.  
(2012-) Board of evaluation of the Italian Minister of Research and Education (MIUR): Programma Operativo Nazionale Ricerca & Competitività (PON02 & PON03), total budget: 150.000.000€.  
(2005-2011) Hiring Committee for Assistant (tenured), Associate and Full Professors of the U. of Catania, Cagliari, Padova, Pisa, and Verona.  
(2005-) Member of the evaluation committee of the EPSRC – Engineering and Physical Sciences Research Council (UK), the Israel Science Foundation (IL), the United States-Israel Binational Science

Foundation (IL), the Estonian Science Foundation (EE), Georgian's Shota Rustaveli National Science Foundation, and Portuguese Fundação para a Ciência e a Tecnologia.

(2005–) Committee for habilitation for professor in France: U. Paris-Dauphine for Dr. M. Martel and Dr. L. Mauborgne; École Normale Supérieure de Cachan for D. Cachera, U. de Grenoble for D. Monniaux, and École Normale Supérieure in Paris for Dr. X. Rival.

(2000-2011) Member in PhD defences in the PhD programme in *Mathématique et Informatique* at École Poytechnique; *Informatique* at IRISA, U. de Rennes (FR); *Informatique* at INRIA Sophia Antipolis (FR); *Informatique* at LORIA, Institut National Polytechnique de Lorraine.

#### Major collaborations (a selection):

(2016) Visiting Prof. at U. of Manoa, Honolulu, USA.

(2015) MERIT Visiting Scholar at the Dept. of Computing and Information Systems, U. of Melbourne.

(2014-2016) Visiting Prof. at IMDEA Software Institute, Madrid.

(2014) Visiting Prof. at Center for Advanced Computing Systems, U. of Louisiana (USA).

(2014) Visiting Scientist at Irdeto Corporation, Canada.

(2010 & 2011) Visiting Prof. at the Dept. d'Informatique (DI) - École Normale Supérieure, Paris.

(2009) Visiting Prof. at the U. Complutense de Madrid (UCM).

(2008) Visiting Prof. at the DI - École Normale Supérieure, Paris.

(2008) Visiting scientists at Department of Computing, Imperial College, London.

(2006, 2002, & 2000) Visiting Researcher at the Laboratoire d'Informatique, Ecole Polytechnique.

#### Grants & Awards:

(2013) Microsoft Research Software Engineering Innovation Foundation (SEIF) Award.

(2007-2017) PI in National (Italian) and International (EU) projects for a total budget of 1.320.000€.

## A 10 years track record

Most of my papers are published in the field of *Programming Languages* and *Formal Methods*. Typical venues are POPL, TOPLAS, SAS, TCS, Inf. & Comp., and J. of Logic and Comput. In the last 10 years I studied abstract interpretation from the perspective of making abstract interpreters imprecise, e.g., for code protection and obfuscation purposes. I contributed in language-based security, malware analysis, and code similarity analysis.

## References

- [1] R. Giacobazzi. Hiding Information in Completeness Holes - New perspectives in code obfuscation and watermarking (Invited Lecture). *The 6th IEEE International Conferences on Software Engineering and Formal Methods, SEFM'08*, pages 7-20, IEEE Press. Cape Town (South Africa), 10-14 November 2008.
- [2] M. Dalla Preda, R. Giacobazzi, and E. Visentini. Hiding software watermarks in loop structures. *The 15th International Static Analysis Symposium SAS'08*, volume 5079 of Lecture Notes in Computer Science, pages 174-188, Springer-Verlag. Valencia, Spain, 16-18 July, 2008.

- [3] R. Giacobazzi and I. Mastroeni. Transforming abstract interpretations by abstract interpretation (**Invited Lecture**). *The 15th International Static Analysis Symposium SAS'08*, volume 5079 of Lecture Notes in Computer Science, pages 1-17, Springer-Verlag. Valencia, Spain, 16-18 July, 2008.
- [4] P. Cousot, R. Cousot and R. Giacobazzi. Abstract Interpretation of Resolution-Based Semantics. *Theoretical Computer Science*, 410(46):4724–4746, 2009.
- [5] M. Dalla Preda and R. Giacobazzi. Semantic-based Code Obfuscation by Abstract Interpretation. *Journal of Computer Security*, 17(6):855-908, 2009.
- [6] R. Giacobazzi and F. Ranzato. Example-Guided Abstraction Simplification. *37th International Colloquium on Automata, Languages and Programming, ICALP10*, volume 6199 of Lecture Notes in Computer Science, pages 211-222, Springer-Verlag. July 5-10, 2010, Bordeaux, France.
- [7] G. Delzanno, R. Giacobazzi, F. Ranzato. Static Analysis, Abstract Interpretation and Verification in (Constraint Logic) Programming (**Invited paper**). In *A 25 years Perspective on Logic Programming: Achievements of the Italian Association for Logic Programming*, volume 6125 of Lecture Notes in Computer Science, pages 136-158. Springer Verlag 2010.
- [8] M. Dalla Preda, R. Giacobazzi, S. Debray, K. Coogan, and G. Townsend. Modelling Metamorphism by Abstract Interpretation. *The 17th International Static Analysis Symposium SAS'10*, volume 6337 of Lecture Notes in Computer Science, pages 218-235, Springer-Verlag. Perpignan, France, Sept. 14-16, 2010.
- [9] R. Giacobazzi and I. Mastroeni. A Proof System for Abstract Non-Interference. *Journal of Logic and Computation*, 20: 449-479. 2010; doi:10.1093/logcom/exp053.
- [10] R. Giacobazzi and I. Mastroeni. Adjoining classified and unclassified information by abstract interpretation. *Journal of Computer Security*, 18(5):751–797. 2010.
- [11] I. Mastroeni and R. Giacobazzi. An Abstract Interpretation-based Model for Safety Semantics. *Journal of Computer Mathematics* 88 (4): 665694. March 2011, DOI: 10.1080/00207161003703205.
- [12] A. Fortunato, M. Passuello and R. Giacobazzi. Relock-based vulnerability in Windows 7. *Virus Bulletin*, pp.16-20, VB August 2011. ISSN 1749-7027.
- [13] C. Collberg, J. Davidson, R. Giacobazzi, Y. Gu, A. Herzberg, and F. Wang. Towards Digital Asset Protection - Position paper. In Expert Opinions of the *IEEE Intelligent Systems*. 26(6):8-13, 2011.
- [14] R. Giacobazzi and I. Mastroeni. Making abstract interpretation incomplete: Modeling the potency of obfuscation. In *The 19th International Static Analysis Symposium SAS'10*, volume 7460 of Lecture Notes in Computer Science, pages 129-145, Springer-Verlag. 11-13 September 2012, Deauville, France.
- [15] R. Giacobazzi, I. Mastroeni, and D. Nikolic. Strong Preservation by Model Deformation. In *The Sixth IEEE International Symposium on Theoretical Aspects of Software Engineering, TASE2012*, pages 33-40. IEEE Press. Beijing, China, July 4-6, 2012.
- [16] R. Giacobazzi. Software Security by Obscurity - A Programming Language Perspective. (Position Paper). In *6th International Conference on Information Systems, Technology and Management*. In Communications in Computer and Information Science, 285, pp. 427-432, 2012. Grenoble, March 28-30, 2012.
- [17] M. Dalla Preda, W. Feng, R. Giacobazzi, R. Greechie, and A. Lakhotia. Twisting Additivity in Program Obfuscation. In *Program Protection and Reverse Engineering (PPREW)*. Communications in Computer and Information Science, 285, pp. 336-347, 2012. Grenoble, March 28-30, 2012.

- [18] R. Giacobazzi, N. D. Jones, and I. Mastroeni. Obfuscation by Partial Evaluation of Distorted Interpreters. In *ACM SIGPLAN Partial Evaluation and Program Manipulation (PEPM'12)*, pp. 63-72. Philadelphia USA, January 23-24, 2012.
- [19] M. Dalla Preda, I. Mastroeni and R. Giacobazzi. Formal Framework for Property-driven Obfuscations. In *Proc. of the 19th Int. Symp. on Fundamentals of Computer Theory*, FCT 2013, Volume 8070 of Lecture Notes in Computer Science, pages 133-144, Springer-Verlag, August 19-21 Liverpool, UK.
- [20] R. Giacobazzi and F. Ranzato. Correctness Kernels of Abstract Interpretations. *Information and Computation*, Volume 237, October 2014, Pages 187203. DOI: 10.1016/j.ic.2014.02.003.
- [21] R. Giacobazzi. Obscuring Code — Unveiling and Veiling Information in Programs. In *16th Int. Symp. on Principles and Practice of Declarative Programming (PPDP 2014)* and *24th Int. Symp. on Logic-Based Program Synthesis and Transformation (LOPSTR 2014)*. (Invited lecture) Canterbury, UK., September 8-11, 2014. DOI: 2643135.2643137.
- [22] R. Giacobazzi, F. Logozzo, and F. Ranzato. Analyzing Program Analyses. In the *42th Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL'15)* , Mumbai, India - January 15 - 17, 2015. ACM 2015. DOI: 2676726.2676987.
- [23] M. Dalla Preda, R. Giacobazzi, A. Lakhotia, and I. Mastroeni. Abstract Symbolic Automata. In the *42th Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL'15)*, Mumbai, India - January 15 - 17, 2015. ACM 2015. DOI: 2676726.2676986.
- [24] M. Dalla Preda, R. Giacobazzi, and S. Debray. Unveiling Metamorphism by Abstract Interpretation of Code Properties. *Theoretical Computer Science*. Volume 577(27):74-97 2015.
- [25] M. Dalla Preda, R. Giacobazzi, and I. Mastroeni. Completeness in Approximate Transduction. In *The 23th International Static Analysis Symposium SAS'16*, Lecture Notes in Computer Science, pages 129-145, Springer-Verlag. September 2016, Edinburgh, UK.
- [26] R. Giacobazzi and I. Mastroeni. Making abstract models complete. *Mathematical Structures in Computer Science* 26(4):658-701 2016.
- [27] I. Mastroeni and R. Giacobazzi. Weakening additivity in adjoining closures. *Order* 33:503516, Springer-Verlag 2016. DOI: 10.1007/s11083-015-9381-9.
- [28] R. Giacobazzi, I. Mastroeni, and M. Dalla Preda. Maximal incompleteness as obfuscation potency. *Formal Aspects of Computing* 29(1):3-31, Springer-Verlag, 2017. DOI: 10.1007/s00165-016-0374-2.
- [29] R. Giacobazzi and I. Mastroeni. Abstract Non-Interference: A unifying framework for weakening information-flow. *ACM Transactions on Privacy and Security (TOPS)*. Volume 21 Issue 2, Article No. 9, February 2018.
- [30] R. Bruni, R. Giacobazzi, and R. Gori. Code Obfuscation Against Abstract Model Checking Attacks. 19th International Conference on Verification, Model Checking, and Abstract Interpretation. VMCAI 2018. Los Angeles Sun 7 - Sat 9 January 2018. USA.
- [31] P. Cousot, R. Giacobazzi and F. Ranzato. Program Analysis is Harder than Verification: A Computability Perspective. 30th International Conference on Computer Aided Verification (CAV 2018), July 14-17, 2018 Oxford (UK).

- [32] F. Bonchi, P. Ganty, R. Giacobazzi and D. Pavlovic. Sound up-to techniques and Complete abstract domains. Thirty-Third Annual ACM/IEEE Symposium on Logic in Computer Science (LICS), 912 July 2018 Oxford (UK).

#### **Invited talks:**

- (2017) Abstract Interpretation for Program Security. *24th Static Analysis Symposium*, August 30th - September 1st, 2017, New York City, NY, USA.
- (2015) Analysing Completeness in Program Analysis. *ETH Workshop on Software Correctness and Reliability*, October 2-3, 2015, ETH Zürich.
- (2014) Obscuring Code - Unveiling and Veiling Information in Programs. *16th Int. Symp. on Principles and Practice of Declarative Programming* (ACM PPDP 2014) and *24th Int. Symp. on Logic-Based Program Synthesis and Transformation* (LOPSTR 2014). Canterbury, UK., September 8-11, 2014.
- (2012) Software Security by Obscurity - A Programming Language Perspective. *6th Int. Conference on Information Systems, Technology and Management*. Communications in Computer and Information Science 285, Springer Verlag, pp. 427-432, 2012. Grenoble, March 28-30, 2012.
- (2011) Algebraic Structures in Program Understanding: A Case Study in Program Protection. *11th Biennial IQSA Meeting Quantum Structures*, 23 - 27 July, Cagliari (Italy).
- (2010) Abstract Interpretation-Based Protection. *11th Int. Conference on Verification, Model Checking, and Abstract Interpretation* VMCAI 2010, Madrid, Spain, January 17-19, 2010.
- (2008) Transforming abstract interpretations by abstract interpretation. *15th Int. Static Analysis Symposium SAS'08*, LNCS 5079, pages 1-17, Springer-Verlag. Valencia, Spain, July 16-18, 2008.
- (2008) Hiding Information in Completeness Holes - New perspectives in code obfuscation and watermarking. *6th IEEE Int. Conf. on Software Eng. and Formal Methods*, SEFM'08, pages 7-20, IEEE Press.

#### **Organisation of scientific events:**

- (2018) Chair of the Shonan Meeting seminar No. 115: *Intensional and extensional aspects of computation: From computability and complexity to program analysis and security*, Japan January 21-25, 2018.
- (2016) *Guaranteed Security*, a selected DEF CON 24 Workshop, August 6, 2016, Las Vegas (USA).
- (2017) Program Chair of the N40AI – *Next 40 Years of Abstract Interpretation*, workshop co-located with POPL 2017 in Paris, Jan. 21st, 2017 and chair and organiser of the *40 Years of Abstract Interpretation – An Interview with Patrick Cousot*, at POPL 2017.
- (2014) Chair of the *Dagstuhl Seminar 14241 on Challenges in analysing executables: Scalability, Self-modifying code and Synergy*. June 9–13, 2014, Dagstuhl, Germany.
- (2013) General Chair of the *ACM POPL'13, 40th ACM Symp. on Principles of Programming Languages*.
- (2013) Program Chair *14th Int. Conf. on Verif., Model Checking, and Abstr. Int. (VMCAI'13)*.
- (2009) Chair of the *30 Years of Abstract Interpretation (30YAI)* workshop in honour of Patrick Cousot co-located with POPL 2009, San Francisco USA.

#### **Major Scientific Committees:**

- (2012-2015) Member of the **Steering Committee of ACM POPL**. Co-author of: *Principles of POPL*, D. Dreyer, J. Field, R. Giacobazzi, M. Hicks, S. Jagannathan, M. Sagiv, P. Sewell, and P. Wadler. *ACM SIGPLAN Notices* - Volume 48 Issue 4S, April 2013. Pages 12-16. ACM New York, NY, USA.
- (2011-) **Co-founder and member of the steering committee of the Int. Summer School of Information Security and Protection: ISSISP'10 - Beijing, ISSISP'11 - Gent, ISSISP'12 - Tucson; ISSISP'13 - Xian; ISSISP'14 - Verona; ISSISP'15 - Rio de Janeiro, ISSISP'16 - Bangalore, ISSISP'17 Gif s/Yvette.**

**(2011–) Co-founder and member of the steering committee of the ACM Software Security and Protection Workshop:** SSP'11 & SSP'12 - Beijing, and SSP'14 - Scottsdale (US), and of the ACM Program Protection and Reverse Engineering Workshop: PPREW-1 - Grenoble, PPREW-2 - Rome, PPREW-3 - San Diego, PPREW-4 - New Orleans, PPREW-5 & 6 - Los Angeles, PPREW-7 - Porto Rico.  
**(1993-2016) Member of the Steering Committees of the Static Analysis Symposium (SAS).**

#### Contribution to early career of researchers

The four most successful researchers that recently graduated under my supervision are the following: Dr. **Samir Genaim**, now Assistant Prof. Universidad Complutense de Madrid. Dr. **Isabella Mastroeni**, now Associate Prof. at the U. of Verona and winner of the best PhD thesis award in Theoretical Computer Science by the Italian Chapter of EATCS. Dr. **Damiano Zanardini**, now Assistant Prof. at the U. Politécnica de Madrid and member of the Computational logic, Languages, Implementation, and Parallelism Laboratory. Dr. **Mila Dalla Preda**, now tenure-track Associate Prof. at the U. of Verona and winner of the QINETIQ Award for research contributions with strong practical applications.

#### Academic life & responsibility

**(2012-2014)** Chair of the *National Scientific Qualification Committee for Professorship in Computer Science* in Italy (5 members, two years appointment). 898 candidates in 2012 and 182 in 2013.

**(2006-2012)** Dean of the College of Science, including the departments of Computer Science and Biotechnology, member of the Academic Senate of the U. of Verona, and member of the executive board of deans of the Italian Faculties of Science and Technology.

#### Industrial innovation:

**(2016–)** Co-founder and scientific adviser of Cythereal. Cythereal is based on a patent-pending technology that performs deep static and dynamic analyses for automatically determining code similarities in x86 binary executables for early malware detection and threat analysis. Cythereal is based in Lafayette, Louisiana (USA) and selected for incubation in TOPXIGHT Labs by Valmiki 504 LLC venture capital.

**(2010–)** Co-founder of JULIA s.r.l., a spin-off company of the U. of Verona, originating from my group, for the commercialisation of a general purpose Java analyser. JULIA is a complex software tool (~200K lines of Java Code) based on Abstract Interpretation for the fully automatic analysis of Java and Android apps. JULIA was subcontractor in the U.S. Air Force Research Laboratory/RITM Contract No. FA8750-12-C-0174, \$291,000.00, through the U. of Washington. JULIA is now part of the Corvallis Group and has been awarded by the *Talento delle Idee* prize by Unicredit Bank and selected as one of the best 9 innovative projects in the area of ICT in the Working Capital Competition by Telecom Italia.