

VINCENZO GERVASI

Curriculum vitae et studiorum

PERSONAL DATA

- Date of birth: 12 August 1968
- Place of birth: Erice (TP), Italy
- Nationality: Italian
- Address: [private]

EDUCATION

- Graduation from Liceo Scientifico “V. Fardella” (Science-oriented High school) in 1987, with full marks.
- “Laurea” degree (M.Sc.) in Computer Science in 1993, from the University of Pisa, *cum laude*.
- “Dottorato di Ricerca” degree (Ph.D.) in Computer Science in 2000, from the University of Pisa. Supervisor: Prof. Vincenzo Ambriola (University of Pisa, Pisa, Italy). Reviewers: Prof. Bashar Nuseibeh (Imperial College, London, UK, and The Open University, UK) and Prof. Daniel Berry (Technion, Haifa, Israel and University of Waterloo, Waterloo, Canada).
- Other higher education (post-M.Sc.) titles:
 - Scuola Nazionale di Dottorato in Informatica, Pontignano (SI), Italy, 1997
 - Lipari School for Computer Science Researchers, Lipari (ME), Italy, 1997
 - GULP School on Advanced Applications of Logic Programming, Maratea (PZ), Italy, 1998
 - PROMOTER School on Software Process Technology, Autrans – Grenoble, France, 1999
 - International School on Information Extraction, Frascati (Rome), Italy, 1999

CURRENT POSITIONS

(since 2004) “Ricercatore” at the Computer Science Department of the University of Pisa (a tenured faculty position in the Italian system roughly equivalent to Assistant Professor)

(since 2004) Onorary Associate at the Department of Software Engineering of the University of Technology, Sydney

PREVIOUS POSITIONS

(1994-1995) professional activity; consultant for the International Plant Genetic Resources Institute of the Food and Agriculture Organization (FAO) of the United Nations (Rome).

(1995-1996) Military service.

(1996-2000) Enrolled in the postgraduate (Ph.D.) program at the University of Pisa.

(2000-2001) Research fellow at the Dipartimento di Informatica of the University of Pisa on the project “Agenti intelligenti: interazione ed estrazione di conoscenza” (Intelligent Agents: Interaction and knowledge extraction).

(2002-2003) Research fellow at the Dipartimento di Informatica of the University of Pisa on the general theme “Informatica” (Computer Science).

RESEARCH OUTLINE

The basic inspiration for the research activity originates from the interest in studying the cognitive aspects of software engineering. In this view, the main research interest has concerned the study of all those activities in the software development process that are related to the definition of the *requirements* for a software system.

The phenomenon has been studied as a formal process [1,2,15], but the focus has then moved to the technology underlying various kind of requirements writing support environment [3,10,16,18,30,35,48] and to the analysis of natural language, both in terms of quality models [8,9,52,53] and in terms of parsing technology [6,12,16,24-26,30,35]. As part of this research, several software systems have been designed and implemented, including CICO (a robust natural language parser based on fuzzy logic) and Circe (an interactive environment for writing, validating and measuring software requirements). The problem of analysing and validating software requirements has been treated as a specialized instance of the more general problem of extracting and manipulating knowledge from textual sources. At the same time, the search for expressive and efficient mechanisms for manipulating knowledge bases has produced interesting results in the field of active-deductive data bases, documented in [4,5,11,14]. In this area we have defined the logical language Active-U-Datalog (that has been subsequently extended to support objects). Moreover, we have studied the interactions between natural language descriptions and other representations that are commonly used in requirements engineering, including SCR specifications [17], Abstract State Machines [19,33,51], UML [20,48], and some form of non-monotonic logic [25,32,43].

The research activity has also produced results in the area of architectural design [7], with a special focus on some common architectures: distributed systems [21,23,28,31,34,39] and web-based systems [22]. In particular, the research in distributed system architectures has had a special focus on foundational aspects, by studying the minimal characteristics that autonomous mobile systems must possess in order to be able to solve certain classes of problems. Other interesting results have been obtained in the more properly linguistic area, with the implementation of several analysis tool and their application of various corpora [29,37].

Various industrial liaisons (and grants) have contributed to the advancement of this research, including a cooperation with ETH-Zurich and Microsoft Research on the formal specification in operational style of the C# language (obtained through a layering of Abstract State Machine models for the various features of the language) [33,42], and another with IBM on the integration of the Circe system into the open-source IDE Eclipse [35].

PARTICIPATION IN RESEARCH PROJECTS

- (1997-1999) European Community, ESPRIT project “PROMOTER” on Software Process Technology.
- (1998) IEI-CNR. Progetto Coordinato CNR “Verifica di requisiti software in linguaggio naturale” (Verification of requirements written in natural language).
- (1998-2000) European Community. ESPRIT project “RENOIR” on Requirements Engineering
- (1999) Dipartimento di Informatica, Pisa and FST, Cagliari. Project “Applicabilità di metodologie innovative alla produzione del software” (applicability of innovative methodologies to the production of software).
- (1999) Dipartimento di Informatica, Pisa and SEK, Pontedera (PI). Project “Metodologie e tecniche di analisi di requisiti software” (methods and techniques for the analysis of software).
- (1999-2001) MURST. National project “Agenti intelligenti: interazione ed estrazione di conoscenza” (intelligent agents: interaction and knowledge extraction).
- (2001) MURST. National project CITATAL (Corpora on line, hypermedia, translation, textual analysis and language learning).
- (2001-2002) Dipartimento di Informatica, Pisa and Institute of Computer-Based Software, Methodology and Technology, Tokyo. Project on “Tecniche di integrazione fra Circe e Lyee” (integration techniques between Circe and Lyee).
- (2001-2002) MURST. Fondo Speciale Innovazione 2000. Project “Tecnologie e servizi per l’accesso avanzato ai contenuti” (technologies and services for advanced content access).
- (2002-2003) Microsoft Research. Rotor Project “Abstract Operational Model for the Semantics of C#”.
- (2003-2004) IBM Eclipse Innovation Award. Project “A Requirements Development Environment in Eclipse”.

GUEST RESEARCHER

- (1999) Department of Computing, Imperial College of Science, Technology and Medicine, London, UK, January – March 1999 (invited by B. Nuseibeh).
- (2001) Research Center for Advanced Systems Engineering, Macquarie University, Sydney, Australia, January – February 2001 (invited by R. Offen).
- (2002) Department of Software Engineering, University of Technology, Sydney, Australia, January – February 2002 (invited by D. Zowghi).
- (2003) Department of Software Engineering, University of Technology, Sydney, Australia, January – February 2003 (invited by D. Zowghi).
- (2003) Department of Software Engineering, University of Technology, Sydney, Australia, November – December 2003 (invited by D. Zowghi).

OTHER SCIENTIFIC ACTIVITIES

- (1997-2004) Served as reviewer for the following journals: *ACM Transactions on Software Engineering and Methodologies*, *Computer Languages*, *Journal of Science of Computer Programming*, *Journal of Research and Practice in Information Technology*, *International Journal of Computer Systems Science and Engineering* e *Formal Aspects of Computing*
- (1997-2004) Served as reviewer for the following conferences: *European Software Engineering Conference (ESEC)*, *Software Engineering Environment (SEE)*, *European Workshop on Software Process Technology (EWSPT)*, *Italian Conference on Teoretical Computer Science (ICTCS)*, *Automated Software Engineering (ASE)*, *Requirements Engineering: Foundation of Software Quality (REFSQ)*, *Australian Workshop on Requirements Engineering (AWRE)*, *International Workshop on Comparative Evaluation in Requirements Engineering (CERE)*.
- (1997-2004) Seminars given at various institutions, including the Department of Computer Science of University College – London (UK), the Department of Computing of the Imperial College in London (UK), the Internationales Begegnungs und Forschungszentrum für Informatik in Dagstuhl (Germany), the Joint Research Centre for Advanced System Engineering in Sydney (Australia), the Department of Computing of the Macquarie University in Sydney (Australia), the Department of Software Engineering of the University of Technology – Sydney (Australia), the Dipartimento di Elettronica e Informazione of the Politecnico in Milan (Italy), the Dipartimento di Anglistica of the University of Pisa (Italy), the Dipartimento di Letteratura Italiana of the University of Pisa, the Istituto di Scienza e Tecnologie dell'Informazione (ISTI) of the CNR in Pisa (Italy).
- (2001) Program committee memembr of the 6th Australian Workshop on Requirements Engineering (AWRE2001).
- (2002) Program committee memembr of the 7th Australian Workshop on Requirements Engineering (AWRE2002). Chair for the session “Research in progress”.
- (2003) Program committee member for the 9th International Workshop on Requirements Engineering: Foundation for Software Quality (REFSQ2003). Discussion Facilitator for the session “Use Cases”.
- (2003) Program committee memembr of the Workshop on State-oriented vs. Event-oriented thinking (in Requirements Analysis, Formal Specification and Software Engineering) (ST.EVE@FM'03), held at the 12th International FME Symposium (FM03).
- (2003) Invited talk at the International Workshop on Requirements Engineering (IWRE03), invited by Collette Rolland. Title of the talk: “The Web as a Requirements Packet”.
- (2003) Organizer and program committee co-chair of the First Workshop on Comparative Evaluation in Requirements Engineering (CERE'03), held at the 11th IEEE Conference on Requirements Engineering (RE03).
- (2004) Program committee co-chair of the 10th International Workshop on Requirements Engineering: Foundation for Software Quality (REFSQ2003).
- (2004) Proponent e program committee co-chair of the Second Workshop on Comparative Evaluation in Requirements Engineering (CERE'04), held at the 12th IEEE Conference on Requirements Engineering (RE04).
- (2004) Program committtee member of the 9th Australian Workshop on Requirements Engineering (AWRE2004).
- (2005) Program committee co-chair of the 11th International Workshop on Requirements Engineering: Foundation for Software Quality (REFSQ2005)
- (2005) Program committee member of the 13th IEEE Conference on Requirements Engineering (RE05).

UNIVERSITY TEACHING (PRINCIPAL)

- (2000-2001) Dipartimento di Informatica, Pisa. “Cultore della materia” in Software Engineering.
- (2001-2002) Accademia Navale, Livorno. Professor of the applicative course on “Informatica” (Computer science) for officers (Ruoli Speciali – Stato Maggiore e Commissariato).
- (2001-2002) Accademia Navale, Livorno. Professor of the course on “Calcolatori Elettronici” (Computers) for foreign officers (NATO countries).
- (2003-2004) Corso di Laurea in Informatica, University of Pisa. Professor of the course “Laboratorio di Programmazione di Sistema” (System programming laboratory).
- (2003-2004) Corso di Laurea in Scienze e Tecnologie per l'Ambiente, University of Pisa. Professor of the course “Informatica Generale” (general computer science) and of the associated laboratory course.

UNIVERSITY TEACHING (SUPPORT)

- (1997-1998) Dipartimento di Informatica, Pisa – Progetto CAMPUS. Support to the course “Basi di dati (laboratorio)” (Database laboratory).
- (1997-1998) Dipartimento di Matematica, Pisa. Support to the course “Teoria e Applicazione delle Macchine Calcolatrici” (Theory and applications of computers).
- (1998-1999) Dipartimento di Informatica, Pisa. Support to the course “Ingegneria del Software (laboratorio)” (Software engineering laboratory).
- (1999-2000) Dipartimento di Informatica, Pisa. Supporto to the course “Ingegneria del Software (laboratorio)” (Software engineering laboratory).
- (1999-2000) Dipartimento di Informatica, Pisa. Support to the course “Laboratorio di Informatica II”.
- (2000-2001) Università di Pisa and Omnitel. Master on “Web&Wireless”; support to the course “Ingegneria del Software (laboratorio)” (Software engineering laboratory).
- (2000-2001) Dipartimento di Informatica, Pisa. Support to the course “Ingegneria del Software (laboratorio)” (Software engineering laboratory).
- (2001-2002) Dipartimento di Informatica, Pisa. Support to the course “Ingegneria del Software (laboratorio)” (Software engineering laboratory).

OTHER POSTGRADUATE TEACHING

- (2002) Lesson at the Lipari International School for University Researchers on the theme “Rigorous UML-like Modeling Techniques” (presented by E. Riccobene), Lipari, Italy.
- (2002) Course at the 2nd IFIP Autumn School on Software Technology on “Requirements Engineering” (presented by V. Ambriola), Cape Town, South Africa

SUPERVISOR OF PH.D., M.SC. AND BACHELOR THESES

- (1998-1999) Co-supervisor of the Tesi di Laurea titled “Uno strumento visuale per la gestione di diagrammi” (A visual tool for the editing of diagrams) by U. Cappellini (Corso di Laurea in Scienze dell’Informazione, Pisa).
- (1998-1999) Co-supervisor of the Tesi di Laurea titled “Uno strumento per la prototipazione rapida di interfacce utente” (A tool for the rapid prototyping of user interfaces) di M. Arioli (Corso di Laurea in Scienze dell’Informazione, Pisa).
- (2001-2002) Co-supervisor of the Tesi di Laurea titled “Generazione automatica di test funzionali” (Automatic generation of functional tests) by S. Guerrieri (Corso di Laurea in Informatica, Pisa).
- (2002) Co-supervisor of the Tesi di Laurea titled “Un agente immobiliare elettronico dalla parte del consumatore” (An electronic real estate agent on the consumer's side) by V. Niro and A. Galligani (Corso di Laurea in Informatica, Pisa).
- (2002-2003) Co-supervisor of the Tesi di Laurea titled “Una libreria Java per il calcolo della Fast Fourier Transform” (A Java library for computing the fast Fourier transform) by A. Grisafi (Corso di Laurea in Informatica, Pisa).
- (2002-2003) Co-supervisor of the Tesi di Laurea titled “Tecniche di confronto tra documenti XMI-UML” (Comparison techniques for XMI-UML documents) by L. Del Carlo (Corso di Laurea in Informatica, Pisa).
- (2003) Academic tutor of the Tirocinio titled “Archivio delle pubblicazioni del Dipartimento di Informatica” (A publications database for the Computer Science department) by M. Federico (Corso di Laurea in Informatica, Pisa).
- (2003-2005) Co-supervisor of the Ph.D. dissertation titled “A Novel and Collaborative Approach to Requirements Elicitation with Process Guidelines and Intelligent Tool Support” by C. Coulin (Postgraduate School in Computer Science, University of Technology, Sydney).
- (2004) Academic tutor of the Tirocinio titled “Servizi della Rete Civica di Livorno – sviluppo sito web su Finanziamenti Comunitari” (Services for the civic network at Livorno – development of a web site on EU grants) by B. Iori (Corso di Laurea in Informatica, Pisa).
- (2004) Academic tutor of the Tirocinio titled “Servizi della Rete Civica di Livorno – sviluppo servizio applicativo per l'utilizzo della Carta d'Identità Elettronica (CIE)” (Services for the civic network at Livorno – development of applicative services for the electronic ID card) by I. Pozzolini (Corso di Laurea in Informatica, Pisa).
- (2004) Academic tutor of the Tirocinio titled “Sistemi Informativi Territoriali in ambiente GNU-Linux: implementazione di nuove funzionalità in GRASS” (Graphical information systems in GNU-Linux environment: implementing new functionalities) by M. Corda (Corso di Laurea in Informatica, Pisa).

OTHER TEACHING AND POPULARIZATION ACTIVITIES

- (1994-1997) Author of courses on *Optimizations in C compilers*, *Object-Oriented Programming* and *Design of graphical user interfaces* on magazines published by the Gruppo Editorial Jackson.
- (1999-2000) Appointed Professor of the course on “Organizzazione e controllo dei processi nella formazione informatica” (Organization and control of processes in computer science curricula), Corso di laurea in Informatica, Università di Pisa. (The course was not actually held due to bureaucratic reasons).
- (2000-2004) Bootstrap courses to first year students on history of computation, architectures, programming, operating systems, network technologies. Dipartimento di Informatica, Pisa.
- (2000-2004) Co-organizer and jury member of the Computer Science contest for high-school students. Dipartimento di Informatica, Pisa.
- (2001-2002) IFTS Course “Tecnico informatico per i servizi di supporto al commercio elettronico e alla gestione dell’ambiente” (IT specialist in support services for electronic commerce and environmental management), Castelnuovo di Garfagnana, Lucca. Professor of the course “Progettazione di Applicazioni Web” (Design of web applications).
- (2004) Intensive courses on “Tecnologie Java per lo sviluppo di applicazioni web” (Java technologies for web applications development) for Netikos s.r.l. (Pisa and Rome) (joint courses with A. Cisternino).

DEVELOPMENT OF SOFTWARE SYSTEMS OF SCIENTIFIC RELEVANCE

Cico A domain-based parser for natural language that combines fuzzy matching techniques, semantic tagging of terms and heuristic approaches to obtain a fast, robust parsing of unrestricted natural language sentences corresponding to a given set of patterns. It can be used as a validating parser for technical documents, or as an information extraction engine for general documents. Cico has been used in Circe to parse requirements document, in CARL to provide a first pass at the logic translation, and in other research to identify the rhetoric structure of an argumentative text, and to extract information from real estate offerings on the web. It has been used also in two third-party requirements management tools developed at the Glasgow Caledonian University and at the Joint Research Center for Advanced System Engineering of CSIRO (Sydney).

URL: <http://islp.di.unipi.it/Cico>

CIRCE A complete web-based, dynamic, reflexive environment used to write, visualize, analyze, validate, and measure requirements document for software systems. It includes the ability to generate UML models corresponding to a given set of natural language requirements, and to export them via XML to other tools. CIRCE has been used for several years both in academic (Universities of Pisa, Padua, and Catania) and in industrial context (with two companies in Italy and one in Japan providing financial support).

URL: <http://circe.di.unipi.it>

- CARL** A tool to translate arbitrary requirements written in natural language to a set of formulae in propositional logic. By applying default reasoning techniques in a belief revision context, inconsistencies in the requirements can be identified and handled. The tool includes a basic theorem prover as well as a scenario generator and model checker, that can provide specific examples of the conditions under which an inconsistency is triggered. Joint work with Didar Zowghi (UTS-Sydney) and Andrew McRae (JRCASE).
- IroStat** A linguistic tool to collect various statistics related to the use of irony in Italian texts; includes an extended POS-tagger for Italian (based on the publicly available TreeTagger) that can handle various kinds of suffixes (diminutives, pejoratives, etc.) whose use is relevant to estimate the ironic content of the text.
- TextWeaver** A linguistic tool that, given an arbitrary (English) text as input, can identify numerous semantic relations between the words that constitute the text, by using the publicly available WordNet database and TreeTagger POS-tagger. The tool produces as output an XML document that can be inspected visually through appropriate editors or used to compute various metrics on the document.
- CORDASim** A graphical simulator for running different types of flocking algorithms in the CORDA distributed model, looking at the behaviour of the units, and collecting metrics to compare the effectiveness of different algorithms.
URL: <http://islp.di.unipi.it/CORDASim>
- URLharvest** An extremely fast URL extractor from a variety of electronic texts, with a special emphasis on mail spools (mailing lists), Netnews and web proxy logs. URLharvest can be used in conjunction with a traditional web spider to ensure that a search engine can rapidly discover or refresh sites that are being “talked about” by a focused community.
- SMACK** A simple model checker to verify that completeness and consistency properties are maintained during the evolutionary development of a logic-based specification of a software system.
- CPE** The Circe Plugin for Eclipse, providing an integrated editing environment for requirements embedded in the Eclipse IDE. Using the CPE, a developer can write natural language requirements according to the Circe method, using all the facilities offered by Eclipse (including colored syntax editing, versioning, on-line validation of the requirements, etc.) and immediately populate his or her Eclipse repository with the Java source code or the UML model generated from the requirements.
URL: <http://circe.di.unipi.it/Eclipse>

PROFESSIONAL ACTIVITIES

- (1992-97) Technical writer and guest editor for Gruppo Editoriale Jackson (computer science magazines aimed at the general public).
- (1992) ENEL. Analisi, specifica e progettazione del sistema di controllo di impianti idroelettrici (Analysis, specification and design of a control system for hydroelectric plants).
- (1993) Bank of Italy. Analisi e progettazione del sistema informatico di supporto all'Albo Nazionale dei Gruppi Creditizi (Analysis and design of the information system for the national banks roll).
- (1996) National Railways. Progettazione del sistema informativo per il supporto e la pianificazione della manutenzione ai treni di classe ETR-450 (Design of the information system for maintainance operations for ETR-450 class trains).
- (2001) Link s.r.l. Progettazione e sviluppo in Java di componenti CORBA per il sistema GAP (Design and development in Java of CORBA components for the GAP system).
- (2003) Consorzio CRETA. Progettazione di un sistema ad agenti per il supporto di simulazioni interattive destinate, ad applicazioni di formazione a distanza (Design of an agent-based system in support to interactive simulations for distance learning).
- (2004) Netikos s.r.l. Courses to Netikos personnel on Java technologies for the development of web applications.

MEMBERSHIP

- Member of ACM since 1997 (*).
Chair of the ACM Student Chapter of the University of Pisa, 1997-99.
- Member of TABOO since 1997.
- Member of GULP since 1998.
- Member of IEEE Computer Society since 1998 (*).
- Member of AI*IA since 1999.

(* membership in some society has been discontinued in protest against the recent adoption of certain contentious US-centric policies that do not serve the interests of the scientific community at large.

- 1993** [1] V. Gervasi and B. Mercurio, “Sull’osservazione e la misura del processo di sviluppo del software”. Tesi di Laurea, Università di Pisa, Dicembre 1993.
- 1994** [2] V. Ambriola, R. Di Meglio, V. Gervasi and B. Mercurio, “Applying a Metric Framework to the Software Process: an Experiment”. In *B. C. Warboys (ed), Software Process Technology. Proc. of the 3rd European Workshop EWSPT'94*. Lecture Notes in Computer Science, 772, pages 207-226, 1994.
- 1997** [3] V. Ambriola and V. Gervasi, “An Environment for Cooperative Construction of Natural-Language Requirement Bases”. *Proc. of the 8th International Conference on Software Engineering Environments*, Cottbus, April 1997. IEEE Computer Society Press, Los Alamitos, pages 124-130.
- [4] V. Gervasi and A. Raffaetà, “Active-U-Datalog: integrating active rules in a deductive database”. Technical Report TR-97-19, Dipartimento di Informatica, Pisa, 1997.
- [5] V. Gervasi and A. Raffaetà, “Integrating Active Rules in U-Datalog”. *Proc. of the Joint Conference on Declarative Programming APPIA-GULP-PRODE '97*, pages 117-128.
- [6] V. Ambriola and V. Gervasi, “Processing Natural Language Requirements”. *Proc. of the 12th IEEE International Automated Software Engineering Conference*, IEEE Press, November 1997, pages 36-45.
- 1998** [7] V. Ambriola and V. Gervasi, “Representing structural requirements in software architecture”. *Proc. of the International Conference on Systems Implementation 2000: Languages, Methods and Tools*. Berlin, February 1998. Chapman & Hall, London, pages 114-127.
- [8] F. Fabbrini, M. Fusani, V. Gervasi, S. Gnesi and S. Ruggieri, “Achieving Quality in Natural Language Requirements”. *Proc. of the 11th International Software Quality Week*. S. Francisco, May 1998.
- [9] F. Fabbrini, M. Fusani, V. Gervasi, S. Gnesi and S. Ruggieri, “On Linguistic Quality of Natural Language Requirements”. *Proc. of the CAiSE Workshop on Requirement Engineering: Foundation for Software Quality*. Pisa, June 1998, pages 57-62.
- [10] V. Ambriola and V. Gervasi “The Case for Cooperative Requirement Writing”. *Proc. of the ECOOP Workshop on Automating the OO Software Development Process*. Bruxelles, July 1998, pages 477-479.
- [11] E. Bertino, B. Catania, V. Gervasi and A. Raffaetà, “Active-U-Datalog: Integrating Active Rules in a Logical Update Language”. In B. Freitag, H. Decker, M. Kifer, A. Voronkov (eds.), *Transaction and change in logic databases, LNCS 1472*, pages 107-133.

- 1999** [12] V. Ambriola and V. Gervasi, "Experiences with Domain-Based Parsing of Natural Language Requirements". *Proceedings of NLDB'99*, June 1999, pages 145-148.
- [13] V. Gervasi and D. Rosaci, "School on information extraction, 2nd edition". *AI*IA Notizie*, 12(4):65-66, December 1999. (in Italiano).
- 2000** [14] E. Bertino, B. Catania, V. Gervasi and A. Raffaetà, "A Logical Approach to Cooperative Information Systems". *Journal of Logic Programming* 43(1):15-48, 2000
- [15] V. Ambriola and V. Gervasi, "Process metrics for requirements analysis". R. Conradi (ed.), *Proceedings of the 7th European Workshop on Software Process Technology*, pages 90-95, February 2000
- [16] V. Gervasi, "Environment Support for Requirements Analysis", Ph.D. thesis, University of Pisa, February 2000.
- [17] V. Gervasi and B. Nuseibeh, "Lightweight validation of natural language requirements". *Proceedings of the 4th International Conference on Requirements Engineering*, pages 140-148, June 2000.
- [18] V. Ambriola and V. Gervasi, "Supporting multiple views on requirements". *Proceedings of the 6th Maghrebian Conference on Computer Sciences*, November 2000, pages 321-330.
- 2001** [19] V. Gervasi, "Synthesizing ASMs from Natural Language Requirements". *Proceedings of the ASM Workshop at EUROCAST 2001*, February 2001, pages 212-215.
- [20] V. Ambriola and V. Gervasi, "On the parallel refinement of NL requirements and UML diagrams". *Proceedings of the ETAPS 2001 Workshop on Transformations in UML*, April 2001.
- [21] V. Gervasi and G. Prencipe, "Need a Fleet? Use the Force!". *Proceedings of the 2nd International Conference on Fun With Algorithms*, May 2001, pages 149-164
- [22] D. Zowghi and V. Gervasi, "Why is RE for web-based software development easier?". *Proceedings of the 7th International Workshop on Requirements Engineering: Foundation for Software Quality*, June 2001, pages 215-220.
- [23] V. Gervasi and G. Prencipe, "Flocking by a set of autonomous mobile robots". Technical Report TR-01-24, Dipartimento di Informatica, University of Pisa, October 2001.
- [24] V. Gervasi, "The CICO Domain-Based Parser". Technical Report TR-01-25, Dipartimento di Informatica, University of Pisa, November 2001.
- [25] D. Zowghi, V. Gervasi, and A. McRae, "Using default reasoning to discover inconsistencies in natural language requirements". *Proceedings of the 8th Asia-Pacific Software Engineering Conference*, December 2001, pages 133-140.

- 2002** [26] V. Gervasi and B. Nuseibeh, "Lightweight Validation of Natural Language Requirements". *Software Practice and Experience* 32(2):113-133, February 2002.
- [27] D. Zowghi and V. Gervasi. "The 3Cs of Requirements: Consistency, completeness and correctness". *Proceedings of the 8th International Workshop on Requirements Engineering: Foundation for Software Quality*, September 2002.
- [28] G. Prencipe and V. Gervasi. "On the Intelligent Behaviour of Stupid Robots". *Proceedings of the 8th AI*IA Conference (GLR)*, September 2002.
- [29] V. Gervasi and V. Ambriola, "Quantitative assesment of textual complexity". In L. Merlini Barbaresi (ed.), *Complexity in Text and Language*, Edizioni PLUS, Pisa, 2002.
- 2003** [30] V. Ambriola and V. Gervasi. "The Circe approach to the systematic analysis of NL requirements". Technical Report TR-03-05, Dipartimento di Informatica, University of Pisa, March 2003.
- [31] V. Gervasi and G. Prencipe. "Robotic cops: The intruder problem". In Prof. of the 2003 IEEE International Conference on Systems, Man and Cybernetics, pages 2284-2289, Washington, DC, USA, Oct. 2003.
- [32] V. Gervasi and D. Zowghi. "On the Interplay between Consistency, Completeness and Correctness in Requirements Evolution". *Information and Software Technology*, Elsevier Science Publishing, 45(14):993-1009, Nov. 2003.
- [33] E. Boerger, G. Fruja, V. Gervasi, R. F. Staerk. "A high-level modular definition of the semantics of C#". Technical report, University of Pisa and ETH Zurich, 2003.

- 2004** [34] V. Gervasi and G. Prencipe. On the efficient capture of dangerous criminals. In *Proc. of the 3rd International Conference on Fun With Algorithms*, Island of Elba, Italy, May 2004.
- [35] V. Ambriola, L. Del Carlo, and V. Gervasi. Eclipse as a requirements engineering environment. In *Proc. of the ICSE Workshop on Directions in Software Engineering Environments*, Edinburgh, Scotland, UK, May 2004.
- [36] V. Gervasi, D. Zowghi, S. Easterbrook, and S. E. Sim, editors. *Proceedings of the First International Workshop on Comparative Evaluation in Requirements Engineering*, Monterey Bay, California, US, 2004. FIT-UTS.
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