

curriculum vitae

A. Eliëns

date of birth: 12/3/52

online version: <http://www.cs.vu.nl/~eliens/cv>

summary description

In my student years I explored the intellectual and aesthetic arena, including the visual arts, electronic computer music, and what in retrospect may be regarded as the foundations of Artificial Intelligence. At a certain stage, I took up an interest in theoretical computer science, which resulted in a Ph.D. degree on the design, semantics and implementation of a distributed logic programming language, about which I published a book, [?]. During my employment at the VU, the focus shifted towards software engineering, and in particular object oriented programming, which resulted in a text book of which a second edition has appeared, [OO2]. Gradually, I developed an interest in hypermedia, multimedia user interfaces and the Web, which took shape in the DejaVU project. The DejaVU project has resulted in the *hush* library, [HUSH], that has been used in the Software Engineering Practicum, and extensions of *hush* such as the simulation library *sim*, [SIM], that has been used for BWI courses. The project also led to a series of publications concerning the Web, which appeared on a number of successive Int. WWW Conferences, [Applications], [Music], [Jamming], [Markup] as well as other conferences, [Animate], [Simulate]. In that time I also organized two consecutive workshops for the WWW5 and WWW6 conferences, entitled, respectively, *Programming the Web* and *Logic Programming and the Web*. The DejaVU project attracted many students of which a selection became research assistants, studying topics such as hypermedia, simulation and visualization, and task modeling and groupware. Recently, I got involved in multimedia retrieval research, in an exchange with the CWI, which resulted in an experimental musical feature detector for MIDI as well as an NWO proposal to extend this approach to virtual worlds and VRML. Today my interest in logic-based approaches is still strong, as testified by the software architecture developed for multimedia feature detection, and a study group at the VU focussed on the application of logic-based programming in software engineering applications. My current interests encompass, in brief, knowledge management, visualization and retrieval in 3D VRML-based virtual worlds.

Lately, I have been working at putting my research efforts, including papers, talks, and software documentation online. In addition, my educational material is becoming available in the form of online lectures. With the second edition, I have also developed online version of my book Principles of Object-Oriented Software Development, that allows for immediate presentation.

See: <http://www.cs.vu.nl/~eliens/online>

diplomas

- 1979 – Doctoraal Philosophy (UvA)
- 1979 – Gerrit Rietveld Academy - painting
- 1985 – Doctoraal Psychology (UvA)
- 1986 – Doctoraal Informatica (UvA, cum laude)
- 1991 – Ph.D. Informatica, prof. dr. J. de Bakker, prof. dr. P. Klint

employment

- 1997-82: project medewerker Institute of Sonology (Univ of Utrecht)
- 1981-82: assistant researcher, Dept of Philosophy, UvA
- 1996-90: assistant researcher, CWI
- 1990-...: universitair docent, Dept of CS, VU
- 1998-2000: senior researcher, CWI (part-time, in exchange with VU)

further information prof dr J.C. van Vliet (VU), prof dr J. Treur (VU/CWI), prof dr M.L. Kersten (CWI/UvA), prof dr P. de Bra (TUE/CWI), prof dr. J.W. de Bakker (CWI/VU).

research activities

projects

- 1994-...: DejaVU Project (Distributed Hypermedia)
- 1997-2001: SINS, VU/UFS Project, with prof dr vd Riet
- 1999-2001: WASP - Web Agent Support Program, with prof dr J. Treur (VU/AI) and prof dr P. de Bra (TUE/CWI)
- 1999-2003: NWO/GBE RIF - Retrieval of Information in Virtual Worlds using Feature Detectors, with prof dr M.L. Kersten (CWI/UvA) and prof dr P. de Bra (TUE/CWI)

workshops

- WWW5: Programming the Web
- WWW6: Logic Programming and the Web

program committees

- EDPD: International Conference on Electronic Publishing, Document Manipulation and Typography
- Webnet 99: World Conference of the WWW and Internet
- IOP – Multimodale Interfaces (prof dr. R. Collier)

educational activities

academic courses

- 1991-...: Practicum Software Engineering
- 1992-...: College/Practicum Object-Oriented Programming
- 1994-97: College Formal Methods
- 1995-...: Caput Hypermedia
- 1993-...: Prac Programmeertalen: Smalltalk
- 1999-...: Introduction Multimedia
- 2000-...: Multimedia Authoring I – Web3D/VRML
- 2001-...: Multimedia Authoring II – Virtual Environments

student projects

- internal projects in DeJaVU Framework
- stages in OO development, CORBA, Web applications

In total I supervised well over 50 students, including 4 foreign students. See the online version for an overview.

promovendi

- 10/4/2001: J.R. van Ossenbruggen – Processing Structured Hypermedia – A Matter of Style
- 17/4/2001: M. van Welie – Task-based User Interface Design
- 8/5/2001: S.P.C. Schönhage – DIVA: Architectural Perspectives on Information Visualisation

extra-academic courses

- CMG/ASZ Course Web Applications (1998-99)
- CMG/ASZ Course Object-Oriented Software Engineering (1998-99)
- SIKS AIO Course: Multimedia, May 1998

administrative activities

- 1992-95: Stuurgroep BWI
- 1996-97: Chair Facultaire Onderwijscommissie
- 1998: Advisor Facultaire Web Commissie
- 1998-99: Advisor Web en Onderwijs
- 1998-99: Administrator IM&SE Colloquium
- 1998-...: Advisor TwinSite-2000
- 1998-...: Opleidingscie Informatica
- 2001-...: Zelfstudie informatica 2001

collected presentations

- Comparative semantics of a backtrackable rendez-vous, INRIA, Paris France, 24 June 1991
- DLP A language for distributed logic programming, Benelog 91, Universiteit Namen, Belgie, 2 september 1991
- Comparative semantics of a backtrackable rendez-vous, CSN 91, Utrecht, 1991
- Responsibilities in OOP, Seminar COOP 92 – Computing and Object Oriented Programming, Universiteit van Amsterdam – Science Data Systems, Sun Microsystems Nederland, 15 jan. 1992
- Asynchronous rendez-vous in distributed logic programming (met E. de Vink) REX Summerschool - Semantics: Foundations and Applications, De Wipfelberg (Apeldoorn), 1-4 juni 1992
- Meta-programming in DLP, ECOOP – Workshop on Reflection and meta-architectures, Jaarbeurs centrum Utrecht, 30 juni 1992
- Distributed Logic Programming for Artificial Intelligence, First Compulog-network workshop on programming languages in computational logic Universita di Pisa, Italy, 6-7 april 1992

- An object oriented approach to distributed problem solving, RSG.1 Workshop on distributed object oriented computing, Valcartier, Canada, 12-15 mei 1992 (invited)
- An object oriented approach to distributed problem solving, ES92 – 12'th Annual Conference on Expert Systems of the British Computer Society Churchill College, UK, 15-17 december 1992
- Deja-Vu: A distributed hypermedia framework Multimedia – Culture, Technology, Interpretation, Trinity College, Dublin, 25-26 maart, 1993
- DejaVu – Hypermedia in Cyberspace World Wide Video Festival - deconstructing visual formats, World Wide Video Center, The Hague, 14 april 1994
- Integrating WWW and Applications (met M. v. Doorn), Int. Workshop on WWW Design Issues '94, CWI, Amsterdam, ERCIM World Wide Web Working Group (W4G), Amsterdam, Nov 29- Dec. 1
- Music in Time-based Hypermedia (met J.R. van Ossenbruggen), European Conference on Hypermedia Technology 1994 (ECHT'94), The Association for Computing Machinery, Edinburgh, United Kingdom, 18-23 september 1994
- Information management, SGML and active documents (met M. van Doorn), Int. Workshop on WWW Authoring and integration tools, Inria, Rocquencourt, Parijs / Frankrijk, febr. 8-10, 1995
- Integrating applications and the World-Wide Web (met M. van Doorn), Third Int. World-Wide Web Conference, Univ. Darmstadt, Duitsland,
- DejaVU – a component-based approach to hypermedia, SIKS - geavanceerde informatiesystemen, TUE, Eindhoven, 6 juni 1995
- Bringing Music to the Web (met J. van Ossenbruggen), Fourth Int. World-Wide Web Conference, MIT, Boston, USA, 11-14 dec
- Beyond object-orientation?, SIKS Themadag, Leiden Universiteit, najaar 1996
- Jamming (on) the Web, The 6th International World Wide Web Conference, Stanford University Santa Clara, USA, 9 april 1997
- Web Agent Support Program, Workshop: Logic Programming and the Web - 6th Int WWW Conference, Stanford University, Santa Clara, USA, 7 april 1997
- Hypermedia support for software engineering, Workshop: Hypertext functionality and the WWW, at the 7th WWW Conference, Brisbane University, Brisbane, Australie, 14 april 1998

- Web Agent Support Program, NWO/DISH Symposium, Vrije Universiteit, Amsterdam, 4 juni 1998
- If Java is the Answer, Object+ Exchange Meeting, Object+ Soestduinen 14 oct 1998
- If research is the question, TTT Database Research Group, CWI, Amsterdam, 8 oct 1998
- Challenges in OO IPA Fall Days, 9 November 1999
- Patterns in Software Architecture, HKU, april 2000

collected publications

An official publication list, as well as a selection of preferred publications can be found through my institute's personal information page:

<http://www.cs.vu.nl/fb/generated/personal/Eliens.html>

books

DLP A. Eliëns, *DLP - A language for distributed logic programming*, Wiley (1992)

OO A. Eliëns,, *Principles of Object-Oriented Software Development*,, Addison-Wesley (1995) ISBN 0-201-62444-3, 513 pgs

Guide A. Eliëns,, *Instructor's Guide to accompany Principles of Object-Oriented Software Development*,, Addison-Wesley (1995) ISBN 0-201-42772-9, 436 pgs

Animate2 Anton Eliëns, Jacco van Ossenbruggen, and Bastiaan Schönbage, Animating the Web — An SGML-based Approach , In: The Internet in 3D — Information, Images and Interaction Academic Press, 1997 pp. 75-96

OO2 A. Eliëns,, *Principles of Object-Oriented Software Development (2nd edn)*,, Addison-Wesley (2000) ISBN 0-201-62444-3, 513 pgs

refereed journals

Art A. Eliëns, Computational Art, Leonardo, 1988

Eliens91 A. Eliëns, Distributed Logic Programming for Artificial Intelligence, AI Communications Vol. 4 No. 1, 1991, pp. 11-21

HUSH A. Eliëns,, Hush – a C++ API for Tcl/Tk, , The X Resource, Issue 14, April 1995, pp. 111-155

refereed conference proceedings

- Eliens89** A. Eliëns, Extending Prolog to a Parallel Object Oriented Language, Proc. IFIP W.G. 10.3 Working Conference on Decentralized Systems (1989) Lyon
- Eliens91c** A. Eliëns, Comparative semantics of a backtrackable rendez-vous, Proceedings CSN'91, SION Utrecht 1991, pp. 182-196
- Eliens92c** A. Eliëns, An object oriented approach to distributed problem solving, in: Research and Development in Expert Systems IX, Proc. ES92, M. Bramer and R. Milne (eds), Cambridge University Press (1992), pp. 285-300
- OssEl94** J. van Ossenbruggen en A. Eliëns,, Music in Time-based Hypermedia,, Proc. European Conference on Hypermedia Technology 1994, pp. 224-227
- Applications** M. van Doorn en A. Eliëns, Integrating WWW and Applications,, Third Int. World Wide Web Conf. – Technology, Tools and Applications, April 10-14, 1995, Darmstadt
- Music** J.R. van Ossenbruggen and A. Eliëns, Bringing music to the Web, Proc. of the Fourth International World Wide Web Conference – The Web Revolution, December 1995. World Wide Web Journal, O'Reilly and Associates, Inc., pp. 309-314
- Animate** A. Eliëns, J.R. van Ossenbruggen, S.P.C. Schönhage,, Animating the Web – an SGML-based approach, Proc. Int. Conf. on 3D and Multimedia on the Internet, WWW and Network, Bradford, 17-18 April 1996, British Computer Society
- SGMLWEB** J.R. van Ossenbruggen, A. Eliëns and S.P.C. Schönhage, Web applications and SGML, Proc EP'96, Special Issue Electronic Publishing Wiley, 1996, Proc EP'96, A. Brown, A Bruggemann-Klein, A. Feng (eds.), Electronic Publishing, Vol. 8 Issues 2,3, Wiley 1995, pp. 51-62
- Simulate** A. Eliëns, F. Niessink, S.P.C. Schönhage, J.R. Vosse, P. Nash, Support for BPR – simulation, hypermedia and the Web, Proceedings Euromedia'96, Euromedia, London 1996
- Jamming** Anton Eliëns, Martijn van Welie, Jacco van Ossenbruggen, and Bastiaan Schönhage, Jamming (on) the Web, Proceedings of the 6th International World Wide Web Conference — Everone, Everything Connected, O'Reilly and Associates, Inc., April 1997, pp. 419-426
- Style** Jacco van Ossenbruggen, Lynda Hardman, Lloyd Rutledge, and Anton Eliëns, Style Sheet Support for Hypermedia Documents, Hypertext'97 — The Eighth ACM Conference on Hypertext ACM Press, 1997, pp 216-217
- Markup** J. van Ossenbruggen, A. Eliëns, L. Rutledge and L. Hardman, Requirements for Multimedia Markup and Style Sheets on the World Wide

Web, Proceedings of the Seventh International World Wide Web Conference (WWW7), in Computer Networks and ISDN Systems, volume 30, Elsevier Science B.V., April 1998, pp 694-696

DIVA B. Schönhage, A. Eliëns, Multi-user visualization: a CORBA/Web-based approach, Int. Conf. on Digital Convergence: the future of the Internet and WWW, British Computer Society, Bradford, UK, 20-23 april 1998, 9 pgs

Euterpe M. van Welie, G.C. van der Veer, and A. Eliëns, Euterpe - Tool support for analyzing cooperative environments, Proceedings of the Ninth European Conference on Cognitive Ergonomics, August 24-26, 1998, University of Limerick, Ireland, pp. 25-30

Users B. Schönhage, P.P. Bakker, A. Eliëns, So many users, so many perspectives, IFIP 12.2 Working Conference on Designing Effective and Usable Multimedia Systems, Fraunhofer Institute. Stuttgart Germany, Sept. 8-10, 1998, Kluwer Academic, pp. 159-172

VRML B. Schönhage and A. Eliëns, Dynamic and Mobile VRML Gadgets, In Proc. VRML99, 23 - 26 February 1999, Paderborn, Germany

Gadgets S.P.C. Schönhage, A. van Ballegooij, A. Eliëns, 3D Gadgets for Business Process Visualization: a case study, VRML/Web 3D - 2000, Monterey CA, Febr 2000

IC2000 Cees Visser, Anton Eliëns, A High-Level Symbolic Language for Distributed Web Programming, Internet Computing 2000, June 26-29, Las Vegas

BizViz Bastiaan Schönhage and Anton Eliëns, Management through Vision: a case study towards requirements of BizViz, International Conference on Information Visualization 2000 (IV 2000) London, England 19-21 July, 2000

NBQ A. van Ballegooij and A. Eliëns, Navigation by Query in Virtual Worlds, Web3D 2001 Conference, Paderborn, Germany, 19-22 Feb 2001

Architecture Zhisheng Huang, Anton Eliëns, and Paul De Bra, An Architecture for Web Agents, Proc. of EUROMEDIA 2001, 2001.

Community Zhisheng Huang, Anton Eliëns, and Cees Visser, 3D Agent-based Virtual Communities, Proc. Web3D 2002 Conference, Tempe Arizona

workshop papers

EV91 A. Eliëns and E.P. de Vink, Asynchronous rendez-vous in the presence of backtracking, ISLP'91 Workshop on Asynchronous Communication, november 1991, San Diego

Eliëns92b A. Eliëns, Meta-programming in DLP, ECOOP Workshop on meta-programming and reflective architectures

- Eliens92d** A. Eliëns, Distributed Logic Programming for Artificial Intelligence (abstract), Proc. Logic Programming in AI, Imperial College, Dept. of Computing, London
- Eliens92e** A. Eliëns, Distributed Logic Programming for Artificial Intelligence (abstract), Proc. First Compulog-network workshop on programming languages in computational logic, Univerista di Pisa, A. Brogi, P. Mancarella and F. Turini (eds.), Pisa Italy
- ElVink92** A. Eliëns and E.P. de Vink, Asynchronous rendez-vous in distributed logic programming, Proc. REX Semantics – Foundations and Applications (1992)
- DoornEl94** M. van Doorn en A. Eliëns,, Integrating WWW and Applications,, ERCIM W4G, Int. Workshop on WWW Design Issues '94, Amsterdam, Nov 29- Dec. 1
- DoornEl95a** M. van Doorn en A. Eliëns, Information management, SGML and active documents, ERCIM W4G,, Int. Workshop on WWW Design Issues '95, Paris Feb. 8-10
- VisserEl95** C. Visser en A. Eliëns,, A Language System Architecture for the Interoperability of Distributed Multi-Paradigm Objects,, European Research Seminar on Advances in Distributed Systems, L'Alpe d'Huez, April 3-7, 1995
- Chatting** M. van Welie and A. Eliëns, Chatting on the Web, Proc. ERCIM W4G Workshop on CSCW and the Web, 7-9 febr 1996 GMD St Augustin, Germany, 1996
- WASP** Anton Eliëns, Paul de Bra, Jan Treur, Francis Brazier, Hans van Vliet, Web Agent Support Program, Proceedings Workshop: Logic Programming and the Web - 6th Int WWW Conference, <http://www.cs.vu.nl/~eliens/WWW6> - 7 april 1997
- Flexible** Bastiaan Schönhage and Anton Eliëns, A Flexible Architecture for User-adaptable Visualization, Proceedings of the Workshop on New Paradigms in Information Visualization and Manipulation,4. Las Vegas, November 1997
- SE** A. Eliëns, Hypermedia support for software engineering, Workshop: Hyper-text functionaility and the WWW, at the 7th WWW Conference, Brisbane, Brisbane University, Brisbane, Australie, 14 april 1998
- XML** J. van Ossenbruggen, A. Eliëns, and L. Rutledge, The Role of XML in Open Hypermedia Systems, Proceedings of the 4th Workshop on Open Hypermedia Systems, Technical Report CS-98-01 of Aalborg University, Denmark

- Ontology** M. van Welie, G.C. van der Veer, A. Eliëns , An Ontology for Task World Models , 5th International Eurographics Workshop on Design Specification and Verification of Interactive Systems DSV-IS98, 3-5 june 1998, Abingdon, UK, Springer-Verlag, pp. 57-70
- Styles** S.P.C. Schönhage, A. Eliëns, From Distributed Object Features to Architectural Styles, Engineering Distributed Objects (EDO '99), ICSE 99 Workshop, Los Angeles, May 17-18, 1999
- Usability-I** M. van Welie, G.C. van der Veer, and A. Eliëns, Usability Properties in Dialog Models, In: 6th International Eurographics Workshop on Usability Properties in Dialog Models Design Specification and Verification of Interactive Systems DSV-IS99 ,pp. 238-253, 2-4 June 1999, Braga, Portugal.
- Usability-II** M. van Welie, G.C. van der Veer, and A. Eliëns, Breaking down Usability, In: Proceedings of Interact 99 ,pp. 613-620, 30th August - 3rd September 1999, Edinburgh, Scotland.
- NOSA** S.P.C. Schönhage, A. Eliëns, Four Ways to Architect your Distributed Objects, NOSA '99, Proceedings of the Second Nordic Workshop on Software Architecture, Edited by Jan Bosch
- Derivatives** M. van der Meij, D. Schouten, A. Eliëns, Design Patterns in Derivatives Software, ICT Architecture in the BeNeLux 1999, November 18-19, 1999, Amsterdam, The Netherlands
- Taxonomy** Zhisheng Huang, Anton Eliëns, Alex van Ballegooij, Paul De Bra, A Taxonomy of Web Agents, IEEE Proceedings of the First International Workshop on Web Agent Systems and Applications (WASA '2000), 2000.
- ConceptSpace** Bastiaan Schönhage and Anton Eliëns, Information Exchange in a Distributed Visualization Architecture: the Shared Concept Space, International Symposium on Distributed Objects and Applications (DOA'00) Antwerp, Belgium 21-23 September 2000
- GuiPatterns** M. van Welie, G.C. van der Veer, A. Eliëns, Patterns as Tools for User Interface Design, International Workshop on Tools for Working with Guidelines, pp. 313-324, 7-8 October 2000, Biarritz, France
- Avatars** Alex van Ballegooij and Anton Eliëns, Avatars in RIF, FASE2FASE 2000 Symposium, Delft, the Netherlands
- VirtualContext** Lloyd Rutledge, Alex van Ballegooij and Anton Eliëns, Virtual Context - relating paintings to their subject, Culture Track of WWW9 in Amsterdam, The Netherlands, Tuesday, May 16th, 2000
- Avatars** Zhisheng Huang, Anton Eliëns, and Cees Visser, Programmability of Intelligent Agent Avatars, Proc. of the Agent'01 Workshop on Embodied Agents, June 2001, Montreal, Canada

Avatars-abstract Zhisheng Huang, Anton Eliëns, and Cees Visser, Programmability of Intelligent Agent Avatars (extended abstract), In: Proceedings of the BNAIC2001, pp. 397-398

miscellaneous

Eliens91b A. Eliëns, *DLP - A language for Distributed Logic Programming*, Ph. D. thesis, University of Amsterdam (1991)

Eliens91c A. Eliëns, Distributed Logic Programming as a tool for the specification and implementation of Object Oriented System, Report VU IR-260, October 1991, 15 pgs.

ElVink92a A. Eliëns and E.P. de Vink, Asynchronous rendez-vous in distributed logic programming, VU IR-291, juni 1992, 26 pgs

ElVink92b A. Eliëns and E.P. de Vink, Asynchronous rendez-vous in distributed logic programming, VU IR-304, september 1992, 30 pgs

EV92 A. Eliëns and C. Visser, Active C++, active classes and communication by rendez-vous, Technical Report Vrije Universiteit IR-299

Eliens94c A. Eliëns., Hush – a C++ API for Tcl/Tk., IR-366, Vrije Universiteit (1994)

SIM D. Bolier en A. Eliëns., Sim – a C++ simulation library., IR-367, Vrije Universiteit (1994)

Chatting2 Martijn van Welie, Anton Eliëns, Chatting on the Web, ERCIM News nr 25 1996, pagina 11

Vitanyi A. Eliëns, Abstraction and Complexity, Liber Amicorum Paul Vitányi, Nov 1996

popular press

OT1 A. Eliëns, Object-georiënteerd en logisch programmeren in DLP (1), OT Magazine, Kluwer Bedrijfswetenschappen 1/94 1994, pp. 13,17

OT2 A. Eliëns, Object-georiënteerd en logisch programmeren in DLP (2), OT Magazine, Kluwer Bedrijfswetenschappen 2/94 1994, pp. 13,14

OT3 A. Eliëns, Interview met Bertrand Meyer over Eiffel, OT Magazine, Kluwer Bedrijfswetenschappen 8/94 1994

OT4 A. Eliëns, Libraries and environments, OT Magazine, Kluwer Bedrijfswetenschappen 9-10 1995, pp. 16-19, 41

Agents A. Eliëns, Agents – technologie of metafoor?, Informatie, jaargang 40, april 1998, pp. 14-17

Java A. Eliëns, Java – een kwestie van vraag en aanbod, Informatie, februari 1999, pp. 6-8