Curriculum Vitae of Dr.Ir. Edwin D. de Jong

Surname:	de Jong
Given names:	Edwin Dirk
Address:	Decision Support Systems Group Institute of Information and Computing Sciences Utrecht University PO Box 80.089 3508 TB Utrecht The Netherlands
URL:	`http://www.cs.uu.nl/~dejong`
Born:	april 5th 1972, Rhenen, The Netherlands
Nationality:	Dutch

Education and Employment

03/03	present	**Universiteit Utrecht** Researcher (*onderzoeker*)	Utrecht
09/02	03/03	**Vrije Universiteit** Postdoctoral researcher	Amsterdam
09/01	08/02	**Brandeis University** Lecturer in Computer Science *NWO Talent / Consilience* postdoctoral fellow	Waltham, MA
09/00	08/01	**Brandeis University** *Fulbright / NWO Talent* postdoctoral fellow	Waltham, MA
06/23/00		**Ph.D., Vrije Universiteit Brussel** Autonomous Formation of Concepts and Communication Advisor: Prof. Luc Steels	
10/96	- 10/96	**GMD** German National Institute for Mathematics and Informatics Research Visiting Researcher	St. Augustin, Germany
05/96	- 01/01	**Vrije Universiteit Brussel** Researcher, Computer Science	Brussels, Belgium
03/96	- 04/96	Traveling	
01/96	- 03/96	**Keuken & de Koning** BV Researcher	Delft, The Netherlands
02/95	- 12/95	**Keuken & de Koning** BV M.Sc. thesis research Exergy efficiency evaluation with neural networks	Delft, The Netherlands
04/93	- 06/93	**Universidad de Barcelona** Media Lab Study project	Barcelona, Spain
08/90	- 01/96	**Delft University of Technology** M.Sc., Technical Informatics Specialisation: Knowledge Based Systems	Delft, The Netherlands
08/84	- 06/90	**Scholengemeenschap Het Loo** VWO (preparatory scientific education)	Voorburg, The Netherlands

Publications

Edited Volumes

1. Proceedings of the ICML-2002 Workshop on Development of Representations. Edwin de Jong and Tim Oates, eds. Publisher: The University of New South Wales, Sydney NSW 2052. ISBN: 0 7334 1934 8.

Refereed Publications

1. De Jong, E.D. and Steels, L.(2004). A Distributed Learning Algorithm for Communication Development. *Complex Systems*, vol. 14, no. 4 (to appear).

2. De Jong, E.D. and Pollack, J.B. (2004). Ideal Evaluation from Coevolution. *Evolutionary Computation*, vol. 12, no. 2(to appear).

3. De Jong, E.D. (2004). Towards a Bounded Pareto-Coevolution Archive. *Proceedings of the Congress on Evolutionary Computation CEC-2004* (to appear).

4. De Jong, E.D. and Pollack, J.B. (2003). Multi-Objective Methods for Tree Size Control. *Genetic Programming and Evolvable Machines*, vol. 4, no. 3, pp. 211-233.

5. De Jong, E.D. (2003). Combining Exploration and Reliability in Coevolution. *Proceedings of the Fifteenth Netherlands/Belgium Conference on Artificial Intelligence BNAIC'03*, pp.179-186. **Best Paper award**.

6. De Jong, E.D. and Pollack, J.B. (2003). Learning the Ideal Evaluation Function. *Proceedings of the Genetic and Evolutionary Computation Conference, coevolution track, GECCO-2003*, pp. 277-288. Springer-Verlag, LNCS series.

7. De Jong, E.D. (2003). Representation Development from Pareto-Coevolution. *Proceedings of the Genetic and Evolutionary Computation Conference, coevolution track, GECCO-2003*, pp. 265-276. Springer-Verlag, LNCS series.

8. Peshkin, L. and De Jong, E.D. (2002). Context-based policy search: transfer of experience across problems. *Proceedings of the ICML-2002 Workshop on Development of Representations.*

9. De Jong, E.D. and Oates, T. (2002). A Coevolutionary Approach to Representation Development. *Proceedings of the ICML-2002 Workshop on Development of Representations.*

10. De Jong, E.D. and Pollack, J.B. (2001). Utilizing Bias to Evolve Recurrent Neural Networks. *Proceedings of the International Joint Conference on Neural Networks IJCNN-2001*, Vol. 4, 2667-2672.

11. De Jong, E.D., Watson, R.A., and Pollack, J.B. (2001). Reducing Bloat and Promoting Diversity using Multi-Objective Methods. Spector, L., E. Goodman, A. Wu, W.B. Langdon, H.-M. Voigt, M. Gen, S. Sen, M. Dorigo, S. Pezeshk, M. Garzon, and E. Burke, eds. *Proceedings of the Genetic and Evolutionary Computation Conference, GECCO-2001*, 11-18. San Francisco, CA: Morgan Kaufmann publishers.

12. De Jong, E.D. (2000). Attractors in the Development of Communication. J.-A. Meyer, A. Berthoz, D. Floreano, H. Roitblat, and S. Wilson (Eds). *Simulation of Adaptive Behavior SAB 2000 Proceedings Supplement Book*, 267-274. Honolulu, Hawaii: International Society for Adaptive Behavior.

13. De Jong, E.D. (1999c). Analyzing the Evolution of Communication from a Dynamical Systems Perspective. *Proceedings of the European Conference on Artificial Life ECAL'99*, 689-693. Berlin: Springer-Verlag LNCS.

14. De Jong, E.D. (1999b). Autonomous Concept Formation. *Proceedings of the International Joint Conference on Artificial Intelligence IJCAI'99*, 344-349. San Francisco, CA: Morgan Kaufmann Publishers. An extended abstract appeared in *Proceedings of the Belgium Netherlands Artificial Intelligence Conference BNAIC'99*.

15. De Jong, E.D. and L. Steels (1999a). Generation and selection of sensory channels. *Evolutionary Image Analysis, Signal Processing and Telecommunications First European Workshops, EvoIASP'99 and EuroEcTel'99 Joint Proceedings*, 90-100. Berlin: Springer-Verlag LNCS 1596.

16. De Jong, E.D. (1999). Coordination Developed by Learning from Evaluations. J.A. Padget (ed.) *Collaboration between Human and Artificial Societies*. Berlin: Springer-Verlag LNAI vol. 1624. An earlier version appeared in *Notes of the VIM'97 Workshop on Collaboration between human and artificial societies*. Universita' di Salerno.

17. De Jong, E.D. (1998a). The Development of a Lexicon Based on Behavior. *Proceedings of the Tenth Dutch Conference on Artificial Intelligence NAIC'98*, 27-36. Amsterdam, The Netherlands.

18. De Jong, E.D. and P. Vogt (1998). How Should a Robot Discriminate Between Objects? A comparison between two methods. *Proceedings of the Fifth International Conference on Simulation of Adaptive Behavior SAB'98*, 86-91. Cambridge, MA: MIT Press.

19. De Jong, E.D. (1997a). An Accumulative Exploration Method for Reinforcement Learning. *Notes of the AAAI'97 Workshop on Multiagent Learning* WS-97-03.

20. De Jong, E.D. (1997). Multi-Agent Coordination by Communication of Evaluations. *Proceedings of Modeling Autonomous Agents in a Multi Agent World (MAAMAW '97).* Magnus Boman and Walter Van de Velde, eds. Berlin: Springer-Verlag.

21. De Jong, E.D., H. Keuken, E. van der Pol, E. den Dekker, and E.J.H. Kerckhoffs (1996). Exergy Analysis of Industrial Processes using AI Techniques. *Computers chem. Engng* Vol. 20, Suppl., S1631-S1636. Great Britain: Elsevier.

22. De Jong, E.D., E. den Dekker, H. Keuken, E. van der Pol, and E.J.H. Kerckhoffs (1995). Computation and Evaluation of Exergy Efficiencies to Support the Development of a Sustainable Future. *Proceedings of the European Symposium for Simulation '95.* Turkey: Society for Computer Simulation.

Non-refereed Publications

1. De Jong, E.D. (2003). Developments in Evolutionary Computation: GECCO-2003. *BNVKI Newsletter*, vol. 20, no. 4, 84-87.

2. Van Otterlo, M. and E.D. de Jong (2003). BeNeLearn 2002. *BNVKI Newsletter*, vol. 20, no. 1, 14-16.

3. De Jong, E.D. (2002). Cognitive Robotics at the University of Toronto. *BNVKI Newsletter*, vol. 19, no. 6, 131-132.

4. De Jong, E.D. (2002). The making of Fruitful "out of control" software *BNVKI Newsletter*, vol. 19, no. 6, 133.

5. De Jong, E.D. (2001). From Machine Learning towards Machine Teaching. *BNVKI Newsletter*, vol. 18, no. 2, 35-38.

6. De Jong, E.D. (1999). The Sixteenth International Joint Conference on Artificial Intelligence. *BNVKI Newsletter* vol. 16, no. 5, 132-135.

7. De Jong, E.D. (1999). Computing Anticipatory Systems. *BNVKI Newsletter* vol. 16, no. 5, 136-137.

8. De Jong, E.D. (1999). The First European Workshop on Evolutionary Image Analysis and Signal Processing. *BNVKI Newsletter* vol. 16, no. 3, 74-75. Part of this article also appeared in: EvoNews. Newsletter of EvoNet - The Network of Excellence in Evolutionary Computing. Issue 11, Summer '99, 12.

9. De Jong, E.D. (1998). The International Conference on Simulation of Adaptive Behavior. *NVKI Newsletter* vol. 15, no. 4., 112-116.

Teaching

- 2002. Lectures on artificial intelligence and unsupervised learning, Vrije Universiteit.
- 2001/2002 (Spring semester). CS-35A: *Fundamentals of Artificial Intelligence*, Brandeis University.
- Nov. 2000. Guest lecture on reinforcement learning, Brandeis University.
- 1997/1998, 1998/1999, and 1999/2000. Organized seminar course *Techniques of Artificial Intelligence*, Vrije Universiteit Brussel.
- 1997 - 1999. Lectures on neural networks, reinforcement learning, and dynamical recognizers, Vrije Universiteit Brussel.
- 07/19/96 - 07/24/96. Lecturer at the First Summer school for New Information Technologies in the Humanities and Social Sciences. Tarnovo, Bulgaria.

Other professional Activities

Workshop co-chair

- *Development of Representations*
  Workshop held at the International Conference on Machine Learning (ICML-2002)
  Sydney, Australia, July 9 2002
  `http://www.demo.cs.brandeis.edu/icml02ws/`
- *Modularity, Hierarchy, and Regularity*
  Workshop to be held at the Genetic and Evolutionary Computation Conference (GECCO-2004)
  Seattle, WA, June 26 2004
  `http://www.mae.cornell.edu/lipson/gecco_modularity.htm`

Editor

10/02	present	Newsletter of the Belgian Dutch Association for Artificial Intelligence (BNVKI).
10/98	08/00	Newsletter of the Belgian Dutch Association for Artificial Intelligence (BNVKI).

Program Committee Memberships

- IEEE Task Force on Coevolution
- Program Committee member, Genetic and Evolutionary Computation Conference (GECCO) 2004.
- Program Committee member, 7th European Conference on Genetic Programming, Coimbra, Portugal, 2004.
- Program Committee member, GECCO Workshop on Analysis and Design of Representations and Operators, Chicago, IL, 2003.
- Program Committee member, 9th European Workshop on Learning Robots, Prague, Czech Republic, 2001.
- Program Committee member, 8th European Workshop on Learning Robots, Lausanne, Switzerland, 1999.
- Program Committee member, 7th European Workshop on Learning Robots, Edinburgh, UK, 1998.
- Program Committee member, 6th European Workshop on Learning Robots, Brighton, UK, 1997.

PhD Committee member

- PhD Committee member, Peter Bosman. Design and Application of Iterated Density-Estimation Evolutionary Algorithms. Defended 05/20/2003. Utrecht University, Institute of Information and Computing Sciences. Advisor: Prof.dr.ir. L.C. van der Gaag.
- PhD Committee member, Patrick Monsieurs. Evolving Virtual Agents using Genetic Programming. Defended 12/05/2002. Limburgs Universitair Centrum (LUC), School for Information Technology. Advisor: Prof.dr. E. Flerackers.

Supervision of Graduate Students

- Martijn de Jong. Graduation date: 08/27/2003, Vrije Universiteit Amsterdam. Informativeness in Coevolution.

Awards and funding

2003	BNAIC Best Paper Award
2001 - 2002	Consilience Postdoctoral Fellowship
2001 - 2002	TALENT stipend, National Organization for Scientific Research in The Netherlands (NWO)
2000 - 2001	*Fulbright* Scholarship for Research and Lecturing
1997 - 2001	OZR (Research Council of the Vrije Universiteit Brussel) full-time research grant
1999	EvoWorkshops99 travel bursary from the EvoNet Network of Excellence
1999	IJCAI Travel Award from the European Coordinating Committee for Artificial Intelligence
1998	International Conference on Simulation of Adaptive Behavior
1997	Summer school on Natural Computation
1997	Modeling Autonomous Agents in a Multi Agent World Workshop
1997	GEOMED (ESPRIT project)
1996	EU Human Capital and Mobility Programme
1995	Delft University of Technology
1995	Keuken & de Koning BV
1993	STIR