Arnoud Visser

Vision

My ambition is to ensure that technological innovation is used to enrich our society. Partly this can be done by doing research that directly impacts our daily life. Yet, this also means that fundamental research has to be translated to solutions that can directly be used in real applications, a process that should be done together with companies and government. The key factor here is to learn from each other; the experience that you share with your students and colleagues.

Knowledge, talents, skills

My strong skills are my flexibility: to easily incorporate new knowledge, to combine that which I already knew and use that for new insights. I easily make contact, engage people in what I am doing and inspire them to work together building nice new things.

International network

In my career I have worked together with many researchers from other universities and institutes, which can be seen from my list of co-authors. I know many of the major players in robotics and artificial intelligence in person.

Professional Appointments

- 2015-present, Programme Director, Bachelor *Kunstmatige Intelligentie*, University of Amsterdam.
- 2013-present, Senior Lecturer, Faculty of Science, University of Amsterdam.
- 2009-2013, Assistant Professor, Faculty of Science, University of Amsterdam.
- 1991-2009, Researcher, Faculty of Science, University of Amsterdam.
- 1987-1991, Research assistant, Faculty of Science, Leiden University.

Education

- Senior University Teaching Qualification (2016), VU Amsterdam.
- Basic University Teaching Qualification (2010), University of Amsterdam.
- PhD in Computer Science (2007), University of Amsterdam, Faculty of Science.
  -- "Measurement-Driven Simulation of Complex Engineering Systems"
- Master in Experimental Physics (1987), Leiden University, Faculty of Science.
  -- "Photochemical hole-burning in organic solids at low temperature".

Research projects

- “Meaningful Control of Autonomous Systems”, cooperation between UvA, TNO, CWI, 2020
- EU FP7-project 287624 “Accompany” ‘Acceptable robotiCs COMPanions for AgeiNg Years’, 2012-2014.
- IIP Cooperation Challenge project 09-NROI-384 Sensor Intelligence for Mobility Systems, 2011-2012.
- Marie-Curie project 218108 “DHRS-CIM” ‘Distributed Human-Robot System for Chemical Incident Management’, 2009-2013
- Interactive Collaborative Information Systems
  BSIK project 3024, 2004-2009
- Advanced Logistics Information Exchange (ALIE)
  Connekt project MG-02-195, 2002 - 2003
- ‘A next generation Electronic Toll Collection system based on time, distance and position’ Norwegian FUNN project, 2001 – 2002
- See for earlier projects, my project page.

Contact information

Arnoud Visser
Fagelstraat 45
2334 AW Leiden
A.Visser@uva.nl
+31 653697548

Marital status

Married, three children.

Hobbies, sports

Volleyball, cycling

Professional Profiles

- LinkedIn
- Google Scholar
- Semantic Scholar
- ResearchGate
- OrcID
- ResearchID

Languages

- Dutch: Native speaker
- English: Professional working proficiency
- French: Elementary proficiency
- German: Elementary proficiency
- Spanish: Rudimentary proficiency

Programming skills

- Pascal
- C
- Prolog
- Assembly
- C++
- Java
- Visual Basic .NET
- C#
- Mathematica
- MATLAB
- Python

Arnoud Visser's research focuses on cooperation of robot teams. Such a cooperation can be created by building a joint world model and/or by shared decision making. He was the founder of the Intelligent Robotics Lab, a place where robotics research in Amsterdam is conducted and shared.

Publications

Arnoud Visser is co-author of 15 journal articles, 20 book chapters, 65 conference papers and 66 technical reports, such as:

- Julian de Hoog, Stephen Cameron and Arnoud Visser, "Role-Based Autonomous Multi-Robot Exploration", Proceedings of the International Conference on Advanced Cognitive Technologies and Applications, pp. 482-487, November 2009.
- Max Pfingsthorn, Bayu Slamet and Arnoud Visser, "A Scalable Hybrid Multi-Robot SLAM Method for Highly Detailed Maps", in "RoboCup 2007: Robot Soccer World Cup XI, Lecture Notes on Artificial Intelligence series, volume 5001, p. 457-464, Springer, , July 2008.
- J. Sturm and A. Visser, "An appearance-based visual compass for mobile robots", Robotics and Autonomous Systems 57 (5), pp. 536-545, 31 May 2009.

The impact of his publications can be estimated from Google Scholar.

Professional Research Activities (e.g.)

- Member of the Executive Committee of the international RoboCup Federation (2012-2018).
- Program manager Decis Lab – cooperation with Thales Research, Delft (2002-2004).
- Program manager 'Evaluation study of the reliability of the technology of road pricing in the Netherlands', Technical Committee, Dutch Ministry of Transport, The Hague (1995-2001).
- Visiting scientist, European Space Agency, ESTEC, Noordwijk, 1993.

PhD Theses, committee (e.g.)

- Zhenglong Sun, "An Energy Efficient Gait for Humanoid Robots Walking on Even and Uneven Terrains", PhD-thesis, Universiteit Maastricht, 27 March, 2019
- Eelke van Foeken, "Utility and Cost evaluation for Shared Awareness", PhD-thesis, University of Amsterdam, 25 October 2017.
- Berend Weel, "Towards Embodied Evolution of Robot Organisms", PhD-thesis, VU Amsterdam, 23 June 2016.
- Willem van Willigen, "Look Ma, No Hands!; Aspects of Autonomous Vehicle Control", PhD-thesis, VU Amsterdam, 28 May 2014.

Master and Bachelor Theses, supervisor

- Arnoud Visser has supervised 27 master theses and 40 bachelor theses (several cum laude).