Curriculum Vitae

Personal Information

Martin Stolle
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Date of Birth: 31. August 1981
Place of Birth: Perpignan, France
Nationality: German

Education

since 9/2003	Carnegie Mellon University, Pittsburgh, Pennsylvania, USA. Graduate Student (Ph. D.) at the Robotics Institute.
6/2004	Master of Science in Computer Science from McGill University, Montreal, Canada. Thesis: "Automated Discovery of Options in Reinforcement Learning". Completed 8/2003, awarded 6/2004.
6/2002	Bachelor of Science with First Class Honors from McGill University. CGPA: 3.66
6/1999	High School Diploma with High Honors from Saint Johnsbury Academy, Vermont, USA Officially recognized as German Abitur with a 1.2 grade (1.0 best - 4.0 worst)
8/1997–5/1999	Saint Johnsbury Academy (Junior and Senior Year)
8/1991–7/1997	Suitbertus Gymnasium Düsseldorf-Kaiserswerth, Germany (5th grade-10th grade)
8/1987–7/1991	Primary school in Düsseldorf-Wittlaer, Germany

Awards and Honors

10/2003	Most Valued Engineer of the week for Red Team
11/2002	Honorable Mention at the ACM Regional Contest, East Central North America Region
11/2001	Honorable Mention at the ACM Regional Contest, East Central North America Region
since 2001	Member of the Golden Key International Honour Society
2001	Emily Ross Crawford Scholarship and James McGill Award at McGill University
1999	Mathematics Award, Science Award and Faculty Service Price at St. Johnsbury Academy
1999	AP Scholar with Distinction
since 1999	Member of the National Honour Society, USA
since 1994	Member of Mensa Germany

Research Experience

since 9/2003	Working with Prof. Christopher Atkeson at the Robotics Institute, Carnegie Mellon University. Working on transfer learning in continuous domains.
9/2001–8/2003	Research Assistant working with Prof. Doina Precup in the School of Computer Science, McGill University. Working on automated discovery of options in Reinforcement Learning
1/2001–4/2001	Research Assistant in the Laboratory for Natural and Simulated Cognition at McGill University. Implemented a Java Applet comparing and contrasting Backpropagation Neural Networks and Cascade Correlation Neural Networks (http://www.psych.mcgill.ca/labs/lnsc/html/Lab-Home.html)
1/2001–4/2001	Honors Project (supervisor: Prof. Doina Precup): "Learning Options in Reinforcement Learning" at McGill Uni-

versity

Work experience

5/2004-8/2004	Internship as software programmer at BMW CarIT. Researched and implemented a natural language speech recognition parser and integrated it into an existing user interface system. (http://www.bmw-carit.de)
8/2003-12/2003	Member of the Red Team, Carnegie Mellon's entry to DARPA's "Grand Challenge", an autonomous car racing competition. Worked on electrical power architecture draft, oversaw drive-by-wire implementation including custom electronics and software implementation. On- and off-board networking. (http://www.redteamracing.org and http://www.darpa.mil/grandchallenge)
9/2001–9/2003	Lab administrator for the Reasoning and Learning Laboratory at McGill University
10/1999–9/2003	Member of the McGill Science Computer Taskforce (student-run volunteer organization administering the campus-wide Faculty of Science undergraduate computer labs at McGill University, Montreal, Canada) (http://taskforce.sus.mcgill.ca)
6/2001–7/2001	Internship as programmer at ismap.com (Marseille, France)
5/2000–7/2000	Internship as system administrator at ihrpreis.de (Düsseldorf, Germany)
1997–1999	Network and web page administrator at Saint Johnsbury Academy (Saint Johnsbury, Vermont, USA)

Teaching Experience

9/2005–12/2005	Teaching Assistant for 16-862, Mobile Robot Programming

1/2000–4/2000	Marker for 189-133, an introductory linear algebra course

Publications

[1] Stolle, M., Atkeson, C. (2006). ”Policies Based on Trajectory Libraries”. In *Proceedings of the International Conference on Robotics and Automation (ICRA 2006)*. (Full Presentation)

[2] Stolle, M., Precup, D. (2002). ”Learning Options in Reinforcement Learning”. In *Abstraction, Reformulation and Approximation, 5th International Symposium, SARA 2002, Kananaskis, Alberta, Canada, August 2002, Proceedings (SARA 2002)*, 212-223. Springer Verlag. (Full Presentation)

Talks

Policies Based on Trajectory Libraries
IEEE International Conference on Robotics and Automation (ICRA) 2006

Automatic Option Creation in Reinforcement Learning
Talk as part of the interview for a Ph. D. position at Istituto Dalle Molle di Studi sull’Intelligenza Artificiale (IDSIA) 2003

Learning Options in Reinforcement Learning
Symposium on Abstraction, Reformulation and Approximation (SARA) 2002

Skills

Programming Languages	Java, C++, C, Turbo Pascal, Objective Pascal (Delphi), M68k Assembler, Scheme, Prolog, Basic, Logo, Perl, VBScript, JScript , Bash Scripts, HTML, Javascript and CSS
Operating Systems	Windows (3.1, 95, 98, NT4 Workstation, NT4 Server, 2000 Professional, 2000 Server, XP Home Edition and XP Professional), Linux (Debian, Red Hat, SuSE and Mandrake), SunOS (Solaris 7 and Solaris 8) and MacOS.

Languages

German: mother tongue

English: excellent in reading, speaking and writing

French: very good in reading, speaking and writing

Miscellaneous

2002	Captain of the 2002 McGill ACM Contest Team
2002	Associate Chair of the McGill Science Computer Taskforce
2000	Driver's license
1999	Motorship Operator's license
1997	Successful participation in the Federal German Computer Programming Contest
1996–1997	Founder and first publisher of "Halbwüchsig" (German Junior Mensa Newsletter)
1996	Successful participation in the Federal German Computer Programming Contest

Interests

Photography, Piano (10 years), Sailing, English and German literature

Pittsburgh, 18. September 2006