

## CURRICULUM VITAE

**Harald Schmidl**  
**Work address:** Department of Computer Science      Email: harald@cs.miami.edu  
P.O. Box 248154      Web: <http://www.cs.miami.edu/~harald>  
Coral Gables, FL 33124  
Phone: (305) 284-4189      Fax: (305) 284-2264

**Home address:** 2947 Coconut Avenue  
Coconut Grove, FL 33133  
Phone: (786) 552-1077

### HIGHER EDUCATION

**Ph.D. Candidate** 01/98-present  
**Computer Science/Computer Engineering** (interdisciplinary program)  
University of Miami, Coral Gables, FL  
Dissertation: *Optimization-Based Animation*  
Advisor: Professor Victor J. Milenkovic  
Anticipated graduation in summer 2002  
Current GPA: 3.6

**Master of Science** 08/94-05/96  
**Computer Science**  
University of Miami, Coral Gables, FL  
Thesis: *Movement Detection in Video Input and its Translation into MIDI Signals*  
Advisor: Professor Stephen Murrell  
GPA: 3.61

**Exchange student** 08/93-08/94  
**Graduate studies in Physics and Computer Science** (non-degree seeking)  
University of Miami, Coral Gables, FL

**Graduate student** 10/91-08/93  
**Applied, Experimental and Theoretical Physics**  
Minor: Medical Physics  
Eberhard-Karls Universität, Tübingen, Germany

**Equivalent to a Bachelor of Science** 11/88-10/91  
**Physics**  
Minors: Mathematics and Chemistry  
Universität Regensburg, Germany

### ACADEMIC EXPERIENCE

**Research Assistant** 01/98-present  
**Department of Computer Science, University of Miami**  
Continuing research in rigid body simulation. Devise new techniques for animation of highly interacting many-body systems. This work was published at SIGGRAPH 2001.  
For samples see <http://www.cs.miami.edu/~harald/jsolid/sig2001.html>.

**Teaching Assistant** 08/94-05/96  
**Department of Mathematics and Computer Science, University of Miami**  
Instructed undergraduates in labs and small group sessions. Responsibilities included preparation of materials, supervision of students, grading and administering tests, and office hours to answer students' questions.

**Lab Assistant**

03/91-07/93

**Department of Physics, Eberhard-Karls Universität Tübingen, Germany**

Conducted labs in Experimental Physics for Chemistry majors during semester breaks. Duties included preparation of labs, supervision, and grading of students' lab reports and tests.

**TEACHING EXPERIENCE**

**Spring 1996** MTH120: Introduction to programming (taught in C++)

**Fall 1995** MTH120: Introduction to programming (taught in C)

**Spring 1995** MTH120: Introduction to programming (taught in Pascal)

**Fall 1994** MTH120: Introduction to programming (taught in Pascal)

**Fall 1994** MTH110: Introduction to Calculus

**NON-ACADEMIC EXPERIENCE****Software developer**

08/96-12/97

**Vision Intertainment GmbH, Ingolstadt/Germany**

Planned, designed, implemented and tested Multimedia projects including production tools, games, graphics applications, and CD-ROMs. Worked closely with graphics designers.

**Beta tester for CPLEX v7.1beta**

02/01-04/01

Testing new version of CPLEX software under development. Reporting bugs and commenting on possible future implementation directions from a user's perspective.

**RESEARCH INTERESTS**

- Computer Graphics
- Computational Geometry
- Animation, Simulation
- Physical Modeling
- Applications in Biology or Chemistry (Molecular modeling)
- Artificial Intelligence
- Neural Nets, Machine Learning
- Programming Languages and Compilers
- Application of computers in foreign areas, such as Music, Visual Arts or Psychology

**JOURNAL PUBLICATIONS**

Victor J. Milenkovic and Harald Schmidl, "Optimization-Based Animation", SIGGRAPH 01.

Harald Schmidl and Victor J. Milenkovic, "A Fast Impulsive Contact Suite for Rigid Body Simulation", submitted to TOG, December 2001.

**CONFERENCE PUBLICATIONS**

Harald Schmidl and Dilip Sarkar, "A Neural Net for Pitch Class Recognition", SPIE 98.

**AWARDS****Outstanding Graduate Student 1999-2000**

Department of Computer Science, University of Miami

**Outstanding Teaching Assistant 1995-1996**

Department of Mathematics and Computer Science, University of Miami

**MEMBERSHIPS**

ACM and SIGGRAPH member since 1999.

**PROFESSIONAL ACTIVITIES**

**Student consultant** in writing a proposal to launch a new Ph.D. program, Department of Computer Science, University of Miami, 2000-2001.

**Volunteer** at 15<sup>th</sup> annual Symposium on Computational Geometry 1999, Miami Beach, 1999.

**Treasurer** of ACM Student Chapter, University of Miami, 1995.

**REFERENCES**

1. Dr. Victor J. Milenkovic (305) 284-4194  
Professor and Ph.D. dissertation advisor vjm@cs.miami.edu
2. Dr. Shahriar Negahdaripour (305) 284-3352  
Professor and Ph.D. committee member shahriar@miami.edu
3. Dr. Brian Mirtich (508) 359-4599 (evenings)  
Researcher brian.mirtich@cognex.com
4. Dr. Dilip Sarkar (305) 284-2265  
Professor and paper co-author sarkar@cs.miami.edu
5. Dr. Christian A. Duncan (305) 284-2254  
Professor and Ph.D. committee member duncan@cs.miami.edu