

BÁLINT MIKLÓS

<http://www.balintmiklos.com>

balint@inf.ethz.ch

EDUCATION

- 11/2006 – date** **PhD Student and Research Assistant, expected graduation 10/2010**
ETH Zürich, Switzerland
Research in Computational Geometry and Computer Graphics
Teaching assistant for Computer Graphics and Surface Modeling lectures (7 semesters)
- 10/2009 – 11/2009** **Visiting Researcher**
Stanford University, USA
Work in the Geometric Computing Group headed by Prof. Leonidas Guibas
- 10/2003 – 09/2006** **Master of Sciences in Computer Science,**
ETH Zürich, Switzerland
Grade Point Average 5.62 (maximum grade 6.00)
- 10/2000 – 10/2003** **Computer Science student**
Technical University of Cluj Napoca, Romania
Grade Point Average 9.57 (maximum grade 10.00)

WORK EXPERIENCE

- 10/2005 – 01/2006** **Software developer intern at Autoform, Zürich, Switzerland**
- Estimation of curvature values and directions on triangle meshes.
 - Design and implementation of a curvature-adaptive surface remeshing algorithm.
- 01/2004 – 09/2005** **Part-time software developer at Infowing, Erlenbach, Switzerland**
- Leader of the “ireen” project, a platform for customized mobile content web delivery based on mobile client capabilities. It was used several years in production even after I left the company, for clients like Coca-Cola Switzerland, Swisscom, etc.
 - Designed and implemented “mms-to-screen”, an application for broadcasting mms messages to public screens. Used at summer festival concert events, swiss national football games etc.

RESEARCH ACTIVITIES

Invited Talks and Short Research Visits:

- Berkeley University, host Prof. J. Shewchuk, USA, (November 2009)
- University of California at Davis, host Prof. N. Amenta USA (November 2009)
- Jena University, host Prof. J. Giesen, Germany (July 2008 and September 2009)
- Max-Planck Institut für Informatik, host Prof. J Giesen, Germany (November 2007)
- Stanford University, host Prof. L. Guibas, USA (Aug 2007)

Peer Reviewer for Conferences:

SoCG 2007, 2008, 2009; Eurographics 2009; SIGGRAPH 2009

WORKSHOPS AND TRAINING

- **Startup School**, Y Combinator, Berkeley, USA (October 2009)
- Computational Geometry and Graphs Summer School, JAIST Kanazawa, Japan (July 2009)
- Algorithmics meets industry workshop, **Google** Zurich, Switzerland (Februar 2009)
- Business Technology Office Seminar, **McKinsey & Co**, Italy (May 2006)
- **Cisco** Certified Network Associate course, Cluj-Napoca, Romania (2002-2003)

PUBLICATIONS

1. Joachim Giesen, Balint Miklos, Mark Pauly: *The Medial Axis of the Union of Inner Voronoi Balls in the Plane*. Accepted to Computational Geometry: Theory and Applications, CGTA in press.
2. Joachim Giesen, Balint Miklos, Mark Pauly, Camille Wormser: *The Scale Axis Transform*. ACM Symposium on Computational Geometry, SoCG 2009.
3. Joachim Giesen, Balint Miklos, Mark Pauly, Camille Wormser: *The Scale Axis Picture Show*. ACM Symposium on Computational Geometry, Multimedia Session SoCG 2009.
4. Joachim Giesen, Balint Miklos, Mark Pauly: *Medial Axis Approximation of Planar Shapes from Union of Balls: A Simpler and more Robust Algorithm*. The 19th Canadian Conference on Computational Geometry, CCCG 2007. Extended version invited to CGTA, see above.
5. Balint Miklos, Joachim Giesen, Mark Pauly: *Medial Axis Approximation from Inner Voronoi Balls: A Demo of the Mesecina Tool*. ACM Symposium on Computational Geometry Multimedia Session, SoCG 2007.
6. Balint Miklos: *Delaunay Refinement for Finite Element Mesh Generation*. Proceedings of "Interdisciplinarity in Engineering" Conference, Targu-Mures, Romania, 2003.

SOFTWARE

Mesecina – computational geometry you can see. An interactive tool to visualize and study the medial axis and related structures. <http://www.agg.ethz.ch/~miklosb/mesecina/>

AWARDS

- Two-times **1st prize** winner at Hungarian Technical Student Conference in 2003 and 2004
- **1st prize** at "Traian Lalescu" Numerical Calculus Competition, Cluj-Napoca, Romania
- Romanian state Merit and Study Fellowship, 2000-2003
- Two-times "Apáczai Fellowship" awarded by Hungarian Ministry of Education, 2000-2002

INTERESTS

Former competitive level international **figure skater** for more than 15 years. Four-time Romanian junior figure skating champion, senior national vice-champion in 1999. Represented Romania at the World Junior Championships and at Junior Grand Prix events in 1997-2001. Medal prizes at several inter-club European competitions in the same period.

SKILLS

Languages: English, German, Romanian, Hungarian

Programming: C/C++, QT, OpenGL, CGAL, Java, C#, Modula-2; *beginner:* Ruby, Python

Development environments: Visual Studio/Windows, XCode/Mac OS, KDevelop/Linux

REFERENCES

Prof. Mark Pauly

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Prof. Leonidas Guibas

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Prof. Joachim Giesen

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