

Bernhard Haeupler

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Princeton, NJ 08540-5233	Date of Birth	7 th of July 1983
USA	Citizenship	German (F1 Visa)

RESEARCH INTERESTS

theoretical computer science, in particular the design and analysis of algorithms for combinatorial (graph) problems

EDUCATION

03/2008	admitted to Computer Science PhD programs at MIT, Stanford, Princeton, Cornell, ...
10/2007 - 06/2008	Princeton University, Department of Computer Science, Visiting Graduate Student
10/2004 - 10/2007	Technical University Munich (TUM), Germany
	06/2008 honors M.Sc. in Applied Mathematics (expected GPA: 4.00)
	10/2007 Diploma in Mathematics (GPA: 4.00)
	10/2007 B.Sc. in TopMath (elite) in Applied Mathematics (best of class)
	10/2006 Pre-Diploma in Computer Science (best of class)
	Pre-Diploma in Mathematics (with highest distinction)
	since 10/2006 TopMath (Applied Mathematics), elite graduate program
	since 10/2005 Computer Science, Diploma program
	2004 - 2008 Mathematics, Diploma program
09/1994 – 06/2004	Gymnasium Neubiberg (high school, Germany), summa cum laude

RESEARCH EXPERIENCE

since 10/2007	Research at Princeton with Robert E. Tarjan (ret@cs.princeton.edu) (see publications 1-4)
10/2006 – 10/2007	TopMath Independent Studies <ul style="list-style-type: none">– research component in TopMath with 43 ETCS credits (= 1290 h)– research topic: network flows especially on planar networks– advisor: Ernst W. Mayr (CS Department, TUM, mayr@in.tum.de)
08/2005 – 12/2005	Research assistant in the Automatic Theorem Proving Group of Tobias Nipkow (nipkow@in.tum.de) <ul style="list-style-type: none">– proving/formalizing theorems with the automatic theorem prover Isabelle– contributions to the Isabelle/HOL library:<ul style="list-style-type: none">– Taylor Series: (with Jacques D. Fleuriot, Lukas Bulwahn)– reflexive tactic for solving inequalities over fields and commutative rings– W. Pugh's omega test for ILP's

CONFERENCES AND SUMMER SCHOOLS

2008	TGGT 2008; Conference Talk “Planarity Algorithms via PQ-trees” Attended SODA 2008
2007	Attended FOCS 2007, WG 2007, STACS 2007
2006	TUM-Mathematics Summer School 2006, Frauenchiemsee (Germany), two weeks TUM-Computer Science Seminar 2006, Brannenburg (Germany), three days Joint Advanced Student School 2006, St. Petersburg (Russia), two weeks
2005	TUM-Interdisciplinary Summer School 2005, Sarentino (Italy), two weeks
2004 – 2006	“Gems of Computer Science” (special TCS program for the best 5% CS undergraduates)

SCHOLARSHIPS, PRIZES, AWARDS (selection)

2008	MIT Presidential Fellowship Go-Bell Scholarship (declined)
2007	Princeton University fellowship TopMath Best Study Award Best Presentation Award
2006	Award for the best Computer Science Pre-Diploma Award for an excellent Mathematics Pre-Diploma Full DAAD (German Academic Exchange Service) scholarship for studies in the USA 2007/2008
since 2005	Scholarship of the German National Merit Foundation (Studienstiftung des deutschen Volkes) (best 0.25% of German students, see www.studienstiftung.org) E-fellows.net scholarship
2005 - 2007	Interdisciplinary program of the Carl Friedrich von Siemens Foundation
2004	Student Award 2004 of the DPG (German Physics Association) Award for the second best high school diploma
1999 – 2003	Several prizes in federal and national mathematic competitions

PUBLICATIONS

“Faster Algorithms for Incremental Topological Ordering”

*with Telikepalli Kavitha, Rogers Mathew, Siddhartha Sen and Robert E. Tarjan, accepted to ICALP 2008, April 2008
to appear in Lecture Notes in Computer Science Series, Springer-Verlag*

“Incremental Topological Ordering and Strong Component Maintenance”

*with Siddhartha Sen and Robert E. Tarjan, February 2008
released under arXiv:0803.0792v1 [cs.DS]*

“Planarity Algorithms via PQ-trees”

*with Robert E. Tarjan, accepted to Topological & Geometric Graph Theory International Conference 2008, January 2008
to appear in Electronic Notes in Discrete Mathematics, Elsevier*

“Finding a Feasible Flow in a Strongly Connected Network”

*with Robert E. Tarjan, December 2007
to appear in Operations Research Letters, Elsevier*

“Maximum flow in planar networks”

diploma thesis, supervised by Ernst W. Mayr, December 2007

OTHERS

former employers: (references on demand)	TUM Mathematics Department, TUM Computer Science Department (research assistant), HDI AG (database management), Ingenieur Büro Handel (3D-CAD tracer), SQS Software Quality Systems AG (software tester), Bayerische Rückversicherung AG (programmer)
commitment:	university: student speaker/representative, initiator and organizer of the TUM Theory Tea highschool: head of the student council, work-group leader, active student government member youth work: certified youth leader, honorary youth work as a leader on several youth camps
languages:	German (native), English (fluent), Latin (“Latinum” certificate)
music:	TUM Campus Choir, AGV Choir Munich, accordion, acoustic guitar (beginner)
sports:	International standard/latin ballroom dance (gold emblem of the German Dancing Association), (beach-)volleyball, ice skating, hiking, snowboarding