A. RESUME

Gregor von Laszewski

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EDUCATION:

Sept. 1991 - Nov. 1996	**Syracuse University**, Syracuse, NY. Completed a Ph.D. in the Department of Computer and Information Science.
Sept. 1990 - Aug. 1991	**The Ohio State University**, Columbus Ohio, special student and graduate fellow in the Department of Computer and Information Science.
Sept. 1987 - Nov. 1990	**University of Bonn**, Diploma/MS in Computer Science with minor Physics.
Sept. 1984 - April 1987	**University of Bonn** Pre-Diploma/BS in Computer Science with minor Physics and Mathematics.

EXPERIENCE:

Jan. 2000 - present	**Computation Institute**. Fellow, at the Computation Institute of Argonne National Laboratory and University of Chicago.
Nov. 1998 - present	**Argonne National Laboratory**, Argonne, IL. Assistant research scientist at the Mathematics and Computer Science Division.
Nov. 1996 - Nov. 1998	**Argonne National Laboratory**, Argonne, IL. Postdoctoral researcher at the Mathematics and Computer Science Division as part of the Globus project.
Sept. 1991 - Nov. 1996	**Syracuse University**, Syracuse, NY. Research Assistant at the Northeast Parallel Architectures Center at Syracuse University. Research in many areas of supercomputing, metacomputing, and computational science.
June. 1994 - Jan. 1995	**NASA Goddard Space Flight Center**, Greenbelt, MD. Research in Athmospheric Science under contract with the University Research Space Agency (USRA).
Sept. 1990 - 1991	**The Ohio State University**, Columbus, OH. Research in graph partitioning.
Feb. 1987 - Sept. 1990	**German National Research Center for Mathematics and Computer Science**, Bonn. Research assistant at the Supercomputer Center. Research in artificial intelligence, genetic algorithms and graph partitioning.
Sept. 1984 - Sept. 1986	**Albert-Einstein Gymnasium**, St. Augustin, Germany. Teaching assistant for computer science. User interface design for a database system.

AWARDS

Mai 1999	Supervised the development of the copyrighted LDAP browser by Jarek Gawor, which was awarded the best student project out of 500 submissions. The browser was issued the Novell approval certificate.
Nov. 1998	Best of show award in the High Performance Computing Challenge, Supercomputing 98, Orlando, FL.
Oct. 1992	Overall best student paper at Supercomputing'92.
Sep. 1990 - Sep. 1991	Recipient of a graduate fellowship at The Ohio State University.
April 1984 - Nov. 1990	Financial support for the graduate studies in Germany by the Federal Republic of Germany for outstanding grades.

LANGUAGES: English and German.

B. PROFESSIONAL ACTIVITIES

Summer 2000	Conference committee of the Metacomputing Workshop as part of IPCC2000.
Summer 2000	Conference committee of the Metacomputing Workshop as part of Grid2000.
Summer 2000	Conference Committee ACM JavaGrande 2000.
December 1999	Host of the 3rd Workshop "Desktop Access to Remote Resources" now called Computing Portals.
June 1999	Leader of the Information Services Working Group of the Grid Forum.
1999	Discussions with multiple key players in Germany about the creation of a Grid Forum like activity in Germany and Europe.
February 1999	Host of the 2nd Workshop "Desktop Access to Remote Resources".
November 1998	Panel member of the JavaGrande Meeting at Supercomputing 1998, Orlando, FL.
November 1998	Organized a Birds of a Feather session on "Desktop access to remote Resources" at Supercomputing 1998, Orlando, FL.
1998	Referee: Journal of International Telemedical Information Society (ITIS) letters.
October 1998	Host of the Workshop "Desktop Access to Remote Resources".
August 1998	Session Chair PDPTA 1998.
1998	Member of the JavaGrande Forum.
1997	Referee: ACM 1997 Workshop on Java for High Performance Networking.
November 1993	Conference Committee Supercomputing 1993.

C. PUBLICATIONS AND PRESENTATIONS

Refereed Publications

[1] Gregor von Laszewski, Mary Westbrook, Ian Foster, Edwin Westbrook, and Craig Barnes. Using Computational Grid Capabilities to Enhance the Ability of an X-Ray Source for Structural Biology. *to be published in IEEE Cluster Computing*, 2000.

[2] Ian Foster, Joeseph Insleay, Gregor von Laszewski, Carl Kesselman, and Marcus Thiebaux. Data Vizualization: Data Exploration on the Grid. *IEEE Computer*, 14:pp. 36–41, Dec. 1999.

[3] Gregor von Laszewski. A Loosely Coupled Metacomputer: Cooperating Job Submissions across Multiple Supercomputing Sites. *Concurency, Experience, and Practice*, Dec. 1999.

[4] Gregor von Laszewski, Mei-Hui Su, Joseph A. Insley, Ian Foster, John Bresnahan, Carl Kesselman, Marcus Thiebaux, Mark L. Rivers, Steve Wang, Brian Tieman, and Ian McNulty. Real-Time Analysis, Visualization, and Steering of Microtomography Experiments at Photon Sources. In *Ninth SIAM Conference on Parallel Processing for Scientific Computing*, San Antonio, TX, March 1999.

[5] Yuxin Wang, Francesco, De Carlo, Ian Foster, Joseph Insley, Carl Kesselman, Peter Lane, Gregor von Laszewski, Derrick Mancini, Ian McNulty, Mei-Hui Su, and Brian Tieman. A Quasi-Realtime X-Ray Microtomography System at the Advanced Photon Source. In *Proceedings of SPIE99*, volume 3772, August 1999.

[6] Gregor von Laszewski, Ian Foster, George K. Thiruvathukal, and Brian Toonen. A Computational Framework for Telemedicine. *Journal of Future Generation Computer Systems*, 14:pp. 10–123, 1998.

[7] Gregor von Laszewski, P. Stelling, I. Foster, C. Kesselman, and C.Lee. A Fault Detection Service for Wide Area Distributed Computations. In *Proc. 7th IEEE Symp. on High Performance Distributed Computing*, pages pp. 268–278, July 1998.

[8] Gregor von Laszewski, S. Fitzgerald, I. Foster, C. Kesselman, W. Smith, and S. Tuecke. A Directory Service for Configuring High-Performance Distributed Computations. In *Proc. 6th IEEE Symp. on High-Performance Distributed Computing*, pages pp. 365–375, 1997.

[9] Gregor von Laszewski. *A Parallel Data Assimilation System and its Implications on a Metacomputing Environment*. PhD thesis, Syracuse University, December 1996.

[10] Gregor von Laszewski. An Interactive Parallel Programming Environment applied in atmospheric Science. In G-R. Hoffman and N. Kreitz, editors, *Making its Mark, Proceedings of the 6th Workshop of The use of Parallel Processors in Meteorology*, pages pp. 311–325, Reading, UK, December 1996. European Centre for Medium Weather Forecast, World Scientific.

[11] Gregor von Laszewski, Mike Seablom, Milo Makivic, Peter Lyster, and Sanya Ranka. Design Issues for the Parallelization of an Optimal Interpolation Algorithm. In G-R. Hoffman and N. Kreitz, editors, *Coming of Age, Proceedings of the 4th Workshop on the Use of Parallel Processing in Atmospheric Science*, pages pp. 290–302, Reading, UK, November 1994. European Centre for Medium Weather Forecast, World Scientific.

[12] Gregor von Laszewski, A. G. Mohamed, and Geoffrey C. Fox. Blocked LU Factorization on a Multiprocessor Computer. *Microcomputer in Civil Engineering*, 8(1):pp. 45–56, 1993.

[13] Gregor von Laszewski, Manish Parashar, A. G. Mohamed, and G. C. Fox. On the Parallelization of Blocked LU Factorization Algorithms on Distributed Memory Architectures. In *Proceedings of Supercomputing 92*, pages 170–179, Minneapolis, MN, November 1992. IEEE Compt. Soc. Press. Best Student Paper Award.

[14] Gregor von Laszewski. Intelligent Structural Operators for the k-way Graph Partitioning Problem. In *Proc. of the 4th intern. Conf. on Genetic Algorithms*, pages pp. 45–52, San Diego, CA, July 1991. Morgan Kaufman. Plenary presentation.

[15] Gregor von Laszewski and Heinz Mühlenbein. A Parallel Genetic Algorithm for the k-way Graph Partitioning Problem. In Hans-Peter Schwefel and Reinhard Männer, editors, *1st inter. Workshop on Parallel Problem Solving from Nature*, volume 496 of *Lecture Notes in Computer Science*, pages pp. 165–169, Dortmund, Germany, October 1990. Springer-Verlag.

[16] Gregor von Laszewski. A Parallel Genetic Algorithm for the Graph Partitioning Problem. In David Fielding, editor, *Transputer Research and Applications 4, Proc. of the 4th Conf. of the North-American Transputers Users Group*, Ithaca, NY, October 1990. IOS Press.

[17] Gregor von Laszewski. A Genetic Algorithm for the Graph Partitioning Problem. Master's thesis, University of Bonn, Bonn, Germany, November 1990. (in German).

Recent Whitepapers and Manuscripts

[1] Gregor von Laszewski and Steve Fitzgerald. Schema definitions for Grid Objects. Proposal to the Gridforum GIS-WG 1, Argonne National Laboratory, September 1999.

[2] Gregor von Laszewski, Ian Foster, Jarek Gawor, Warren Smith, and Steven Tuecke. CoG Kits: A Bridge between Commodity Distributed-Computing and High-Performance Grids. In *Preprint*, Argonne National Laboratory, Argonne, IL 60439, U.S.A., September 1999. http://www-unix.mcs.anl.gov/ laszewsk/cog/.

Copyrights

[1] Gregor von Laszewski and Jarek Gawor. Copyright of the LDAP Browser/Editor . http://www.iit.edu/ gawojar/ldap/, August 1999.

Grants

[1] Gregor von Laszewski, Randall Bramley, and Donald F. McMullen. Grid-based X-Ray Crystallography Collaboratory. Next Generation Internet proposal, July 1999.

Selected Technical Reports

[1] Gregor von Laszewski. A Collection of Graph Partitioning Algorithms: Simulated Annealing, Simulated Tempering, Kernighan Lin, Two Optimal, Graph Reduction, Bisection. Technical Report SCCS 477, Northeast Parallel Architectures Center at Syracuse University, April 1993.

[2] Gregor von Laszewski, Manish Parashar, A. Gaber Mohamed, Geoffrey C. Fox, Thomasz Haupt, N. T. Lin Kim Millsand Y. H. Lu, and N. K. Yeh. Application Benchmark Set for Fortran D and High Performance Fortran. Technical Report SCCS 327, June 1992. Rice University, CRPC-TR92260.

[3] Gregor von Laszewski, Manish Parashar, A. G. Mohamed, and G. C. Fox. High Performance Scalable Matrix Algebra Algorithms for Distributed Memory Architectures. Technical Report CRPC-TR92210, Center for Research on Parallel Computation, Rice University, Houston, TX, June 1992.

Recent Invited Talks

[1] Gregor von Laszewski. Using LDAP in the real world. De Paul University, Chicago, IL,, January 2000.

[2] Gregor von Laszewski. 1st International Workshop on Computingportals and 3rd International Workshop on Desktop Access to Remote Resources as part of ISCOPE99. http://www.computingportals.org, December 1999. Organizer of the Workshop.

[3] Gregor von Laszewski. Panelist at ISCOPE 99. http://www.computingportals.org, December 1999. Discussed Commodity Technologies and Grid.

[4] Gregor von Laszewski. 2nd International Workshop on Desktop Access to Remote Resources. http://www.computingportals.org, February 1999. Organizer of the Workshop.

[5] Gregor von Laszewski. Proposal for the Gridforum Information Service Working Group. Redondo Beach, CA. http://www.gridforum.org, August 1999.

[6] Gregor von Laszewski. Information services for the Common Component Architecture. Knoxville, TN, July 1999.

[7] Gregor von Laszewski. MCS Brown-bag: LDAP and the Metacomputing Directory Service. Argonne, IL, August 1999.

[8] Gregor von Laszewski. Application programming in the Grid. Aachen, Germany, September 1999.

[9] Gregor von Laszewski. The Globus Grid Infrastructure. Juelich, Germany, September 1999.

[10] Gregor von Laszewski. Dattor, Gridforum, and Computing Portals. Juelich, Germany, September 1999.

[11] Gregor von Laszewski. The Use of Compilers in Scientific Computing. Illinois Institute of Technology, Lecture as part of the Compiler Design Class, April 1999.

[12] Gregor von Laszewski. 1st International Workshop on Desktop Access to Remote Resources. Argonne, IL, http://www.computingportals.org, October 1998. Organizer of the Workshop.

[13] Gregor von Laszewski. Reusable Components of Globus^J, October 1998.

[14] Gregor von Laszewski. SC98 BoF: Desktop Access to Remote Resources. Orlando, FL, http://www.computingportals.org, Nov. 1998. Organizer and Panelist of the BoF.

[15] Gregor von Laszewski. SC98 BoF: Java Grande. http://www.javagrande.org, Orlando, FL, Nov. 1998. Panelist of the BoF.

[16] Gregor von Laszewski. Recent development in the Globus Project. In *2nd Symposium on Multidisciplinary Environments And Applications*, MAPINT '98/MDICE Workshop, Dayton, Ohio USA, August 1998. Aeronautical Systems Center (ASC), Major Shared Resource Center (MSRC), and Wright-Patterson AFB.

[17] Gregor von Laszewski. The Globus Project: A Metacomputing Toolkit for Multidisciplinary Applications. In *1st Symposium on Multidisciplinary Environments And Applications*, MAPINT '97/MDICE Workshop, Dayton, Ohio USA, August 1997. Aeronautical Systems Center (ASC), Major Shared Resource Center (MSRC), and Wright-Patterson AFB.

[18] Gregor von Laszewski. Using The Globus Metacomputing Toolkit for Seamless Computing. Supercomputing Center at ECMWF, Reading, UK, December 1997.

Seminars

[1] Gregor von Laszewski, Ian Foster, and Carl Kesselman. The Globus User Tutorial. In *Tutorials of the IEEE SC99 Conference*, November 1999.

[2] Gregor von Laszewski and Steven Fitzgerald. The Globus Grid Programming Toolkit. In *Tutorials of the 7th IEEE Symp. on High Performance Distributed Computing*, July 1998.

[3] Gregor von Laszewski. Introduction to the Metacomputing Toolkit. High Performance Computing Tutorial, The National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, April 1998.

Other Presentations

[1] Gregor von Laszewski. Introduction to Genetic Algorithms, July 1998.

[2] Gregor von Laszewski, Mary L. Westbrook, Craig Barnes, and Ian Foster. Supercomputing Data Analysis with an Example on the APS CATs. In *International Workshop on New Opportunities for Better User Group Software(NOBUGS)*. Argonne, IL, December 1997.

[3] Gregor von Laszewski. Introduction to Java. Illinois Institute of Technology, May 1997.

[4] Gregor von Laszewski. Metacomputing in Atmospheric Science. Presented at Northeast Parallel Architectures Center, Syracuse University, http://www.npac.syr.edu/users/01/gregor, May 1996.

[5] Gregor von Laszewski. Parallel Optimal Interpolation. NASA Goddard Space Flight Center, June 1996.

[6] Gregor von Laszewski and Geoffrey C. Fox. Tcl/Tk Internet Applications. In *Supercomputing 95 Tutorial: Web Technologies for Education*. IEEE, 1995.