# Gregor von Laszewski, Ph.D.

Adjunct Associate Prof. Intelligent Systems Engineering
Assistant Director Digital Science Center
https://laszewski.github.io 
CV from September 16, 2021 available at

School of Informatics and Computing and Engineering Indiana University
Multidisciplinary Engineering and Sciences Hall
2425 N Milo Sampson Lane
Bloomington, IN 47408

8282 South Stone Ridge Rd Bloomington, IN 47401 (812) 824-8660 laszewski@gmail.com

#### **EDUCATION**

Ph.D., Computer Science, Syracuse University, Syracuse, NY

Sep. 1991 - Nov. 1996

Thesis: A Parallel Data Assimilation System and Its Implications on a Metacomputing Environment

Advisor: Geoffrey C. Fox

Fellowship at The Ohio State University, Columbus, OH

Sep. 1990 - Sep. 1991

Graduate exchange student

M.S. Computer Science (Diplom Informatiker), University of Bonn, Germany

Sep. 1987 - Nov. 1990

in collabooration with

The German National Institute for Information Technology (GMD),

now Fraunhofer-Gesellschaft

Thesis: A Parallel Genetic Algorithm for the K-way Graph Partitioning Problem

Major: Artificial Intelligence

Minor: Physics

Advisor: Heinz Mühlenbein

B.S. Computer Science (Vordiplom), University, of Bonn, Germany.

Sep. 1984 - Apr. 1987

Major: Coputer Science

Minor: Physics

## **EXPERIENCE**

Adjunct Professor, Intelligent Systems Engineering Department

Sep. 2016-present

Indiana University, Bloomington, IN

Assistant Director, Digital Science Center

Jul. 2012 - present

Indiana University, Bloomington, IN

Assistant Director of Cloud Comuting, Community GridsLab

Jul. 2009 - 2015

Indiana University, Bloomington, IN

Adjunct Professor, Computer, Science Department

Sep. 2012 - Sep. 2015:

Indiana University, Bloomington, IN

Lead Architect, FutureGrid

Jul. 2009 - Jan. 2015

Indiana University, Bloomington, IN

Scientist, Argonne National Laboratory,

Apr. 2002 - Jul. 2009

Mathematics and Computer Science Division. Argonne, IL.

Sabbatical from Argonne National Laboratory

Aug. 2007 - Jul. 2009

Associate Professor, Rochester Institute of Technology, Rochester, NY

Director, Service-Oriented Cyberinfrastructure Laboratory

Overall best research poster at Supercomputing 2004 Poster won among 109 submissions. Pittsburgh, PA, U.S.A.  Chicago Innovation Award As member of the Globus Project, Chicago, IL, U.S.A.  Department of Energy Outstanding Mentor Award Argonne, IL, U.S.A.  Best of Show award in the High-Performance Computing Challenge Supercomputing, 98 Received the award on stage, coordinated across multiple National Labs the application was leading to the HPC Challange award, Orlando, FL.  Fellowship, University Space Research Agency (USRA) at Goddard Space Flight Center.  Fellowship, The Ohio State University.	Nov.  Oct.  Apr.  Nov.	2003
Overall best research poster at Supercomputing 2004 Poster won among 109 submissions. Pittsburgh, PA, U.S.A.  Chicago Innovation Award As member of the Globus Project, Chicago, IL, U.S.A.  Department of Energy Outstanding Mentor Award Argonne, IL, U.S.A.  Best of Show award in the High-Performance Computing Challenge Supercomputing, 98 Received the award on stage, coordinated across multiple National Labs the application was leading to the HPC Challange award, Orlando, FL.	Oct. $Apr.$	2003 2003 1998
Overall best research poster at Supercomputing 2004 Poster won among 109 submissions. Pittsburgh, PA, U.S.A.  Chicago Innovation Award As member of the Globus Project, Chicago, IL, U.S.A.  Department of Energy Outstanding Mentor Award Argonne, IL, U.S.A.	Oct. $Apr.$	2003
Overall best research poster at Supercomputing 2004 Poster won among 109 submissions. Pittsburgh, PA, U.S.A.  Chicago Innovation Award As member of the Globus Project, Chicago, IL, U.S.A.  Department of Energy Outstanding Mentor Award	Oct.	2003
Overall best research poster at Supercomputing 2004 Poster won among 109 submissions. Pittsburgh, PA, U.S.A. Chicago Innovation Award		·
Overall best research poster at Supercomputing 2004	Nov.	2004
Sandia National Laboratories Recognition Award Member of the CMCS Team, Livermore, CA, U.S.A.	Mar.	2005
Special Judges award at the FLL Robotics World Championship  Team coached won the special judges award, Detroit. The team also won multiple championship awards in the State of Indiana (2015–2018).		2018
Best Staff Award. School of Informatics, Computing, and Engineering, Bloomington, IN, U.S.A.	Sept.	2018
AWARDS		
Research assistant, German National Research Center for Information Technology (GMD) now Frauenhofer Gesellschaft, Sankt Augustin, Germany	· Sept.	1990
Research assistant, NASA Goddard Space Flight Center University Research Space Agency (USRA), Greenbelt, MD.	- Jan.	1995
Postdoctoral researcher, Argonne National Laboratory Mathematics and Computer Science Division. Argonne, IL.	- Nov.	1998
Visiting professor/Guest Lecturer, Illinois Institute of Technology.  Jan. 2002 Computer Science Department, Chigaco IL	- Dec.	2002
Assistant computer scientist, Argonne National Laboratory, Nov. 1998 Mathematics and Computer Science Division. Argonne, IL.	- Apr.	2002
Visiting Professor, University of North Texas.  Department of Computer Science and Engineering, Denton, TX,	- Jan.	2005
	- Jul.	2007
Fellow, Computation Institute, University of Chicago Computation Institute, Chicago, IL,		

Associate Professor, Computer Science Department

Department for Education and Research, Germany

Financial waiver by due to outstanding grades upon graduation.

Sep. 1989

#### Awards for Activities Supervised by Dr. von Laszewski

- 1. Best student research project 2015, Indiana University SOIC
- 2. Supervised the building of a cluster on a wall from recycled computer parts by 8 undergraduate honors students. The resulting cluster wall was presented by a student to the Institute and he won 1 of 5 awards among 65 group presentations, Aug. 2008.
- 3. Supervised the development of a Grid certificate authority that was awarded the best student project at Polytechnic New York.
- 4. Supervised the development of an LDAP browser that won the Novel developers award.

## **GRANTS**

- 1. NSF: co-PI Gregor von Laszewski, XD Metrics Service (XMS), Jul. 2015 − Aug. 2021, #1445806, 🗹, \$750K Total to G. von Laszewski
- XPS: FULL: DSD: Collaborative Research: Rapid Prototyping HPC Environment for Deep Learning, July
   2, 2018 Aug 2022, Geoffrey Fox gcf@indiana.edu (PI), Judy Qiu (Co-PI), Gregor von Laszewski (Co-PI),
   \$315,000.00
- 3. NSF: co-PI Gregor von Laszewski, CSR: An Analytic Approach to Quantifying Availability (AQUA) for Cloud Resource Provisioning and Allocation #1409809/1409256, \$100K total to G. von Laszewski.
- 4. NSF: co-PI Gregor von Laszewski, XD TAS, with University of Buffalo, \$750K total to G. von Laszewski, 9/2009 − 9/2015, 🗷
- 5. NSF: co-PI Gregor von Laszewski, XPS: FULL: DSD: Collaborative Research: Rapid Prototyping HPC Environment for Deep Learning, \$315K total.
- NSF: Gregor von Laszewski, Gregor von Laszewski, PI at Indiana University, Collaborative Research: DDDAS-TMRP: An Adaptive Cyberinfrastructure for Threat Management in Urban Water Distribution Systems, FY2009-2010, \$183K
- 7. NSF: Gregor von Laszewski, OGCE, subcontract with Indiana University, \$216K 9/1/2007 8/31/2010
- 8. Microsoft: Gregor von Laszewski, Donation of a 40 node cluster.
- Microsoft: Gregor von Laszewski, PI. What to teach in advanced Cyberinfrastructure. Aug. 2008, \$5K.
   Summer 2008
- 10. Healthcare: Gregor von Laszewski, PI at RIT and Technical Director of the Emergency Directory Service, Development of an Emergency Directory Service. Subcontract with STEP of a grant-funded through GRRHIO via the NYSDOH. Nov 2008 Aug 2010, \$130K. Jan. 2009 Aug. 2010. Transitioned in Aug 2009 to RIT as moving the grant was not possible.
- 11. DOE: Gregor von Laszewski, PI, LDRD On-demand calculation of Advanced Photon Source Data, Awarded, Oct. 06, 2006-2007, \$300K.
- 12. DOE: Gregor von Laszewski, PI at Argonne National Laboratory SBIR on Insightful Workflows, Awarded. Sep. 06, \$30K
- 13. NSF: Gregor von Laszewski, PI at University of Chicago, Collaborative Research: DDDAS-TMRP: An Adaptive Cyberinfrastructure for Threat Management in Urban Water Distribution Systems, University of Chicago, FY2006-FY2008, \$52K, ANI0540076
- 14. DOE: Al Wagner, Branko Ruscic, and Gregor von Laszewski. Active Thermo Chemical Tables as part of the DOE SciDAC Collaboratory for Multiscale Chemical Science, \$600K, Sept. 2004 Jun. 2006.
- 15. NSF: David Angulo and Gregor von Laszewski. REU Site: An Interdisciplinary REU Site for Bioinformatics and Grids, CNS0353989, \$260K, FY2004 FY2006.

- NSF: Gregor von Laszewski. Collaborative Research: Grid Portal Middleware, ANI0330545, NMI: \$393K, 1 Sep. 2003 - Sep. 2006.
- 17. DOE: Gregor von Laszewski and Keith Jackson. Commodity Grid Kits, Enabling Middleware Gregor von Laszewski for Designing Science Applications to enable Grid workflows. **2**, \$500K, Sep. 2004 Sep. 2006.
- 18. DOE: Gregor von Laszewski and Keith Jackson. Commodity Grid Kits, Enabling Middleware for Designing Science Applications. 7, \$750K, Sep. 2002 Sep. 2004.
- 19. NSF: Gregor von Laszewski. Java CoG Kit Technologies, NSF Grant ACI9619019, \$245K, FY2002 FY204.
- 20. Microsoft: Gregor von Laszewski. Microsoft Equipment Donation, \$5K, FY2003.
- 21. Microsoft: Gregor von Laszewski. Microsoft Software Donation: MSDN Subscription, FY1992-FY2006.
- 22. DOE: Al Wagner, Brank Ruscic, and Gregor von Laszewski. Active Thermo Chemical Tables as part of the DOE MICS Collaboratory for Multiscale Chemical Science, \$900K, Sept. 2001 Sept. 2003.
- 23. DOE: Randy Brameley, Rick McMullan, John Hoffman, and Gregor von Laszewski. NGIA Grid-based Collaboratory for RealTime Data Acquisition IU/ANL, FWP 56890, \$300K, FY1999.

## SELECTED EDUCATIONAL ACTIVITIES

- 1. Undergraduate Research Opportunities
  - Virtual Summer REU at Florida Agricultural and Mechanical University support of 18 students from which 17 were minorities, Summer 2020
  - Summer Research Experience at Indiana University Supervised 5 students from which 4 ara minorities, Summer 2021
  - Undergraduate Research Opportunities in Computing, Indiana University 2020, 2021
  - Research experience for undergraduates Leading the organization of a group of 10 undergraduate students
  - RIT Honors Class, Parallel Compute Cluster, Rochester Institute of Technology, 2008
  - NSF REU Site on Grid Computing and Bioinformatics, DePaul University 2004-2006
  - Interprofessional Project Team Course, IPRO at Illinois Institute of Technology, Chicago, IL, Spring 2003
  - DOE/NSF Faculty-Student Teams (FaST) Program, Argonne National Labs, IL, 2003, 2002
- 2. Various courses related to Grid Computing and Big Data, Indiana University
  - ENGR-E 599 Independent Study in Cloud Computing Engineering and AI, Spring 2020, Fall 2020, Spring 2021
  - CSCI-B 649 Graduate: Topics in Systems with focus on Cloud Computing, Spring 2020
  - ENGR-E 616 Graduate: Advanced Cloud Computing, Spring 2018, Spring 2020
  - ENGR-E 516 Graduate: Engineering Cloud Computing Spring 2018, Fall 2018, Spring 2019, Spring 2020
  - INFO-I 423 Undergraduate: Big Data Applications and Analytics (Undergraduates), Fall 2016
  - INFO-I 523 Graduate: Big Data Applications and Analytics (Graduates), Fall 2016
  - ENGR-E 599 Graduate: Topics in Intelligent Systems Engineering, Fall 2016
  - CSCI-Y 790 Graduate: Graduate Independent Study, Fall 2014
- 3. STEM student activities
  - K5-6: Summer Camp, Indiana University, Introduction to Robotics and Python, Summer 2014
  - K5-6: Introduction to Robot Programming, Indiana University
  - K-12: Introduction to Cloud Computing for K-12 students, Purdue University K-12 Education Seminar, Sept. 2012
  - K-12: Designing a Raspberry PI Cluster Case, Indiana University
  - K5-12: Summer Camp on Robotics, Indiana University

#### Thesis Advised

- 1. MS: JavaScript CoG Kit. Fugang Wang, Rochester Institute of Technology, Dec 2009.
- 2. MS: GreenIT VM scheduling. Casey Rathbone, Dec 2010.
- MS (Masters Project): Grid Security. Akylbek Zhumabayev, Rochester Institute of Technology, Graduation June 2009.
- 4. PhD: GridTorrents. Ali Kaplan, Indiana University, June 2009.
- 5. MS: GridShell, Boris Wachtmeister, Technical University Aachen, Germany, March 2008.
- 6. MS: Deployment Issues in Grid Computing. Guru Prasad, Southern Illinois University, Fall 2006.
- 7. PhD: An Integrated Architecture for Ad Hoc Grids. Kaizar Amin, Computer Science and Engineering Department, University of North Texas. Jan, 2006.
- 8. BS: Grid Service Data Needed for Estimation of Reliability in Scientific Workflow Systems, Daniel Colonnese, North Carolina State University, 2004.
- 9. MS: Grid Eigen Trust, A Framework for Computing Reputation in Grids. Beulah Kurian Alunkal, Computer Science Department, Illinois Institute of Technology, Chicago. Dec 2003.
- 10. MS: The Java CoG Kit Grid Desktop, A Simple and Central Approach to Grid Computing Using the Graphical Desktop Paradigm, Pankaj R. Sahasrabudhe, University of Louisville, 2003.
- 11. MS: Adapting BPEL4WS to the Grid, (committee member), Marcial Rion, Mathias Kengelbacher, A workflow language proposal for Grid environments, 2000, Main Advisor: Dr. Josef M. Joller, School of Technik, Raperswil, CH
- 12. BS: A Grid Certificate Authority, Mike Sosonkin, Polytechnic University, Brooklyn, New York (Best student project of the graduating class)

#### H-INDEX

As of August 21, 2021 Google scholar reported 11210 and an h-index of 46

#### TECHNICAL STRENGTHS

Throughout my carreer, I have used many software systems and programming languages. I have developed and overseen many different projects that simplified utilization of Cloud, Distributed Computing, and Grid Infrastructure. I am the lead architect of cloudmesh. I was the lead architect of FutureGrid (a multicloud deployment) and the Java CoG Kit which supported many application portals to provide easy access to heterogeneous distributed HPC infrastructure.

Cloud Computing VM, Containers, cloudmesh interfaces with AWS, Azure, Google, Oracle

Web related REST, JSON, YAML

Computer Languages Python, Java, Perl, C, C++, OCCAM, and others

Administration Project execution

GitHub I am managing over 200 GitHub repositories

Collaboration I am able to lead and work in large collaborative projects

#### STANDARDS DOCUMENTS

egment:01 -bigdata 2019-nist

- [1] NIST Big Data, Web Page, Feb. 2020. [Online]. Available: 🗹.
- [2] G. von Laszewski and W. L. Chang, "NIST Big Data Interoperability Framework: Volume 8, Reference Architecture Interfaces," National INstutute of Standards, Tech. Rep., Jun. 2019. [Online]. Available: Z.

ist-vol8

[3] "NIST Big Data Interoperability Framework: Volume 8, Reference Architecture Interfaces," NIST, Gaithersburg, MD 20899, NIST Special Publication 1500-9r1, Oct. 2019. [Online]. Available: 🗹.

001-gosv3

[4] G. von Laszewski, M. Helm, S. M. Fitzgerald, P. Vanderbilt, B. Didier, P. Lane, and M. Swany, "GOSv3: A Data Definition Language for Grid Information Services," in *Argonne National Laboratory and Pacific Northwest Laboratory and Grid Forum Working Group Document GWD-GIS-011-11*, 2001. [Online]. Available:

01-gosv2

[5] S. Fitzgerald, G. von Laszewski, and M. Swany, "GOSv2: A Data Definition Language for Grid Information Services," in *Global Grid Forum and GWD-GIS-011-5*, 2001. [Online]. Available: \(\overline{\mathcal{C}}\).

## COPYRIGHTED SOFTWARE

gment:02 b-browser

[6] J. Gawor and G. von Laszewski, LDAP Browser/Editor, Copyright, 2000.

#### PROCEEDINGS

gment:03 oud-proc

[7] G. von Laszewski, R. Grossman, M. Kozuchand, R. McGeer, and D. Milojicic, Eds., FederatedClouds '12: Proceedings of the 2012 Workshop on Cloud Services and Federation, and the 8th Open Cirrus Summit, San Jose, California, USA: ACM, 2012, ISBN: 978-1-4503-1754-2. [Online]. Available: \(\mathbb{Z}\).

hop-data

[8] Workshop on data intensive computing in the clouds-DataCloud, 2011, p. 1033. [Online]. Available: 🗹.

-2007-gce

 [9] G. von Laszewski, Ed., Grid Computing Environments 2007 Conference Proceedings, in conjunction with IEEE/ACM SC07, Reno, NV: Published Mar. 2008, Rochester Institute of Technology, Rochester NY, Nov. 2007.

-2006-gce

[10] G. von Laszewski, Ed., *Grid Computing Environments 2006 Confernce Proceedings*, in conjunction with IEEE/ACM SC06, Tampa, FL: Published Aug. 2008, Rochester Institute of Technology, Rochester NY, Nov. 2006.

## SELECTED CLASS BOOKS AND PROCEEDINGS

gment:04 cloudeng

[11] G. von Laszewski, "Cloud Computing," Indiana University, Bloomington IN, U.S.A., Online Book, Feb. 2020. [Online]. Available: 🗷.

k-python

[12] —, "Python for Cloud Computing," Indiana University, Bloomington IN, U.S.A., Online Book, Feb. 2020. [Online]. Available: 🗷.

ok-linux

[13] —, "Linux for Cloud Computing," Indiana University, Bloomington IN, U.S.A., Online Book, Feb. 2020. [Online]. Available: 🗷.

markdown

[14] —, "Scientific Writing with Markdown," Indiana University, Bloomington IN, U.S.A., Online Book, Feb. 2020. [Online]. Available: 🗷.

ook-tech

[15] —, Cloud Technologies, 3rd ed., ser. Indiana University, Class Book. Bloomington IN, U.S.A.: Online, Dec. 2019, p. 998. [Online]. Available: 🗹.

handbook

[16] G. von Laszewski and G. C. Fox, *Handbook of Clouds and Big Data*. Bloomington. IN: Indiana University, Dec. 2018. [Online]. Available: \(\mathbb{C}\).

rojects-1

[17] G. Laszewski, Ed., Projects in Big Data Software and Applications (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, May 2017. [Online]. Available:

ftware-1

[18] G. Laszewski, Ed., Big Data Software 1 (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, Dec. 2017. [Online]. Available: 🗹.

ftware-2

[19] G. Laszewski, Ed., Big Data Software 2 (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, Dec. 2017. [Online]. Available: 🗷.

se-vol-2

[20] G. Laszewski, Ed., Use Cases in Big Software and Analytics (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, Dec. 2017, vol. 2. [Online]. Available: .

se-vol-1

[21] G. Laszewski, Ed., Use Cases in Big Software and Analytics (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, Dec. 2017, vol. 1. [Online]. Available: .

se-vol-3

[22] G. Laszewski, Ed., Use Cases in Big Data Software and Analytics (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, Jan. 2018, vol. 3. [Online]. Available: 🗷.

ch-vol-8

[23] G. Laszewski, Ed., Cloud and Big Data Technologies (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, May 2018, vol. 8. [Online]. Available: 🗹.

ch-vol-9

[24] G. Laszewski, Ed., Cloud and Big Data Technologies (Proceedings), ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University, May 2018, vol. 9. [Online]. Available: 2.

ceedings

[25] G. Laszewski, Ed., Cloud Computing Papers, Class Proceedings, ser. Online Books Digital Science Center. Bloomington, IN: Online, Indiana University. [Online]. Available: 🗹.

parallel

[26] G. von Laszewski, Issues in Parallel Computing. 1995. [Online]. Available: 🗹.

#### BOOK CHAPTERS

gment:05 -bigdata

[27] G. von Laszewski, F. Wang, Lee, Hyungro, Chen, Heng, and G. C. Fox, "The FutureGrid Testbed for Big Data," in *Cloud Computing for Data-Intensive Applications*, ser. BigSystem '14, X. Li and J. Qiu, Eds., Vancouver, BC, Canada: Springer, 2014, TBD, ISBN: 978-1-4503-2909-5. DOI: 10.1145/2609441.2609638. [Online]. Available: 2.

kchapter

G. C. Fox, G. von Laszewski, J. Diaz, K. Keahey, J. Fortes, R. Figueiredo, S. Smallen, W. Smith, and A. Grimshaw, "Contemporary High Performance Computing," in, J. S. Vetter, Ed., 1st ed. Boca Raton, FL: Chapman and Hall/CRC, 2013, vol. 1, ch. Futuregrid: a Reconfigurable Testbed for Cloud, HPC and Grid Computing, pp. 603–636, republished in 2018, ISBN: 9781351104005. [Online]. Available:

ondemand

[29] J. Dayal, C. Rathbone, L. Wang, and G. von Laszewski, "Towards on Demand IT Service Deployment," in *Internet Policies and Issues. Volume* 7 - 2nd quarter, Nova, 2011, pp.249–262, ISBN: 978-1-61668-745-8.

nchapter

[30] A. J. Younge, G. von Laszewski, L. Wang, and G. C. Fox, "Providing a Green Framework for Cloud Based Data Centers," in *The Handbook of Energy-Aware Green Computing*, Ahmad, I., Ranka, and Sanjay, Eds., Chapman and Hall/CRC Press, 2011, ch. 17, ISBN: 978-1-4665-0116-4. [Online]. Available:

loudcomp

[31] T. Kurze, L. Wang, G. v. Laszewski, J. Tao, M. Kunze, F. Wang, D. Kramer, W. Karl, and J. Ekanayake, "Cyberaide Virtual Applicance: On-Demand Deploying Middleware for Cyberinfrastructure," in *International Conference on Cloud Computing (CloudComp'09)*, ser. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Avresky, D. R., Diaz, Michel, Bode, Arndt, Ciciani, Bruno, Dekel, Eliezer, Akan, Ozgur, Bellavista, Paolo, Cao, Jiannong, Dressler, Falko, Ferrari, Domenico, Gerla, Mario, Kobayashi, Hisashi, Palazzo, Sergio, Sahni, Sartaj, Shen, X. (Sherman), Stan, Mircea, Xiaohua, Jia, Zomaya, Albert, Coulson, and Geoffrey, Eds., vol. 34, Munich, Germany: Springer Berlin Heidelberg, Oct. 2010, pp. 132–144, ISBN: 978-3-642-12636-9. DOI: 10.1007/978-3-642-12636-9\_10. [Online]. Available: \(\mathscr{L}\).

workflow

[32] G. von Laszewski, M. Hategan, and D. Kodeboyina, "Java CoG kit workflow," in Workflows for e-Science, Springer London, 2007, pp. 340–356. DOI: 10.1007/978-1-84628-757-2\_21. [Online]. Available: 2.

dination

[33]

—, "Work coordination for Grid computing," in *Grid Technologies*, ser. State-of-the-art in Science and Engineering, M. Bekakos, G. Gravvanis, and H. Arabnia, Eds., vol. 5, Wit, 2006, ISBN: 1-84564-055-1. [Online]. Available:  $\square$ .

low-book

G. von Laszewski, M. Hategan, and D. Kodeboyina, "Grid Workflow with the Java CoG Kit," in Workflows for E-science: Scientific Workflows for Grids, I. J. Taylor, E. Deelman, D. B. Gannon, and M. Shields, Eds., Secaucus, NJ, USA: Springer-Verlag New York and Inc., 2007, ISBN: 1846285194. [Online]. Available: .

qos-book

O. Rana, A. Akram, R. Al-Ali, D. Walker, G. von Laszewski, and K. Amin, "Quality-of-Service Based Grid Communities," in *Extending Web Services Technologies: The Use of Multi-Agent Approaches*, ser. Multiagent Systems, Artificial Societies and Simulated Organizations, L. Cavedon, Z. Maamar, D. Martin, and B. Benatallah, Eds., vol. 13, Springer, 2005, ISBN: 0-387-23343-1. DOI: 10.1007/0-387-23344-X\_8. [Online]. Available: .

ddleware

G. von Laszewski and K. Amin, "Middleware for Communications," in *Grid Middleware*, Q. H. Mahmoud, Ed., Wiley, 2004, pp. 109–130, ISBN: 0-470-86206-3. DOI: 10.1002/0470862084.ch5. [Online]. Available:

-gestalt

[7] G. von Laszewski and P. Wagstrom, "Gestalt of the Grid," in *Tools and Environments for Parallel and Distributed Computing*, ser. Parallel and Distributed Computing, S. Hariri and M. Parashar, Eds., Wiley, 2004, pp. 149–187, ISBN: 978-0-471-47484-5. [Online]. Available:

l-pattern

K. Amin and G. von Laszewski, "High-Level Grid Execution Patterns," in Distributed Computing - IWDC 2004, Springer Berlin Heidelberg, 2004, pp. 543-543. DOI: 10.1007/978-3-540-30536-1\_69. [Online]. Available: \(\overline{\mathcal{L}}\).

nidleware

[39] G. von Laszewski and K. Amin, "Grid Middleware," in *Middleware for communications*, Q. Mahmoud, Ed. Chichester, England and Hoboken, NJ: Wiley, 2004, ISBN: 978-0-470-86206-3. [Online]. Available:

computing

[40] G. von Laszewski, J. Gawor, S. Krishnan, and K. Jackson, "Commodity Grid Kits - Middleware for Building Grid Computing Environments," in *Grid Computing: Making the Global Infrastructure a Reality*, ser. Communications Networking and Distributed Systems, F. Berman, G. Fox, and T. Hey, Eds., Wiley, 2003, pp. 639–656, ISBN: 0-470-85319-0. [Online]. Available:

cmt-book

[41] G. von Laszewski, M.-H. Su, J. Insley, I. Foster, and C. Kesselman, "Sourcebook of Parallel Computing," in *Quasi-Realtime Microtomography Experiments at Photon Sources*, J. Dongara, I. Foster, G. Fox, W. Gropp, K. Kennedy, L. Torczon, and A. White, Eds., New York: Morgan Kaufman Publishers, 2003, pp. 258–265, ISBN: 9781558608719. [Online]. Available:

medicine

#### JOURNAL ARTICLES

gment:06 21-covid

[43] G. C. Fox, G. von Laszewski, F. Wang, and S. Pyne, "AICov: An Integrative Deep Learning Framework for COVID-19 Forecasting with Population Covariates," *Journal of Data Science*, vol. 19, no. 2, pp. 293–313, 2021, ISSN: 1680-743X. DOI: 10.6339/21-JDS1007. [Online]. Available:

14-xdmod

[44] J. C. Browne, R. L. DeLeon, A. K. Patra, W. L. Barth, J. Hammond, M. D. Jones, T. R. Furlani, B. L. Schneider, S. M. Gallo, A. Ghadersohi, R. J. Gentner, J. T. Palmer, N. Simakov, M. Innus, A. E. Bruno, J. P. White, C. D. Cornelius, T. Yearke, K. Marcus, G. Laszewski, and F. Wang, "Comprehensive, open-source resource usage measurement and analysis for HPC systems," *Concurr. Comput. Pract. Exp.*, vol. 26, no. 13, pp. 2191–2209, 2014. DOI: 10.1002/cpe.3245. [Online]. Available:

ondemand

[45] L. Wang, T. Kurze, J. Tao, M. Kunze, and G. von Laszewski, "On-demand Service Hosting on Production Grid Infrastructures," The Journal of Supercomputing, vol. 66, no. 3, pp. 1178–1193, 2013. DOI: 10.1007/s11227-011-0666-5.

d-kernel

[46] T. R. Furlani, M. D. Jones, S. M. Gallo, A. E. Bruno, C.-D. Lu, A. Ghadersohi, R. J. Gentner, A. K. Patra, R. L. DeLeon, G. von Laszewski, F. Wang, A. Zimmerman, F. R., B. I. Schneider, M. D. Jones, J. Towns, D. L. Hart, A. K. Patra, R. L. Deleon, S. M. Gallo, C.-D. Lu, A. Ghadersohi, R. J. Gentner, A. E. Bruno, J. R. Boisseau, F. Wang, and G. Laszewski, "Performance Metrics and Auditing Framework using Application Kernels for High-performance Computer Systems," *Concurrency and Computation: Practice and Experience*, vol. 25, no. 7, pp. 918–931, Jul. 2013. DOI: 10.1002/cpe.2871. [Online]. Available:

1-energy

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[185] G. C. Fox, A. J. Younge, G. von Laszewski, A. Kulshrestha, and F. Wang, *Rain: Dynamically Provisioning Clouds within FutureGrid*, SC10 International Conference for High Performance Computing, Nov. 2010.

r-portal

[186] M. P. Thomas, L. C. J. Burruss, G. C. Fox, D. Gannon, L. Gilbert, G. von Laszewski, K. Jackson, D. Middleton, R. Moore, and et al., *Grid Portal Architectures for Scientific Applications*, DOI SciDAC Meeting 2005 (Poster), San Francisco, CA, Jun. 2005. [Online]. Available: Z.

ter-chem

[187] T. C. Allison, S. Bittner, B. Didier, M. Frenklach, W. H. Green Jr., D. Hale, M. F. Hategan-Marandiuc, C. Lansing, G. Laszewski, D. Leahy, J. D. Myers, M. Minkoff, D. Montoya, L. Oluwole, C. Pancerella, R. Pinzon, W. Pitz, L. Rahn, J. Riese, B. Ruscic, K. Schuchardt, A. F. Wagner, T. Windus, C. Yang, and G. Young, Collaboratory for Multi-scale Chemical Science, DOI SciDAC PI Meeting (Poster), Charleston, SC, Mar. 2004.

r-cogkit

[188] G. von Laszewski and K. Jackson, Commodity Grid Kits, DOI SciDAC PI Meeting (Poster), Charleston, SC, Mar. 2004. [Online]. Available: Z.

000-xport

[189] D. McMullen, R. Bramley, J. C. Huffman, J. Bollinger, E. D. amd Kia Huffman, and G. vonLaszewski, *The Xport collaboratory for high-brilliance X-ray crystallography*, SC Poster, 2000. [Online]. Available:

## REPORTS

ment:010 20-covid

[190] G. C. Fox, G. von Laszewski, F. Wang, and S. Pyne, "AICov: An Integrative Deep Learning Framework for COVID-19 forecasting with population covariates," CoRR, vol. abs/2010.03757, 2020. arXiv: 2010.03757. [Online]. Available:  $\square$ .

2020-uroc

[191] G. von Laszewski, A. Orlowski, R. Otten, A. Chai, R. Markowitz, S. Gandhi, and C. Wilson, "Towards Automatically Generated Hybrid Multi-Cloud AI Services," Indiana University, UROC report, 2020. [Online]. Available: \(\overline{\mathcal{Z}}\).

cloudmesh

[192] G. von Laszewski, B. Abdul-Wahid, F. Wang, Lee, Hyungro, Fox, G. C, Chang, and Wo, "Cloudmesh in support of the NIST Big Data Architecture Framework," Indiana University, Bloomingtion, IN 47408, USA, Tech. Rep., 2017.

u-genome

[193] L. Saggu, S. Ekanayake, Y. Ruan, G. von Laszewski, and G. C. Fox, "Genomic Sequence Analysis Automation," Indiana University, Tech. Rep., Jul. 2014, Poster. [Online]. Available: 🗹.

ud-usage

[194] H. Lee, G. von Laszewski, F. Wang, and G. C. Fox, "Towards understanding cloud usage through resource allocation analysis on xsede," Indiana University, Bloomington, IN, Tech. Rep., Mar. 2014. [Online]. Available:

2-fg-1471

[195] F. Desprez, G. Fox, K. K. Emmanuel Jeannot, M. Kozuch, D. Margery, P. Neyron, L. Nussbaum, C. Perez, O. Richard, W. Smith, G. von Laszewski, and J. Voeckler, "Supporting Experimental Computer Science," Argonne National Laboratory, Argonne, Report, Mar. 2012. [Online]. Available: .

ployment

J. Diaz, G. von Laszewski, F. Wang, and G. C. Fox, "Towards cloud deployments using futuregrid," Tech. Rep., 2011. [Online]. Available: Z.

3-cumulus

[197] L. Wang, G. von Laszewski, M. Kunze, and J. Tao, "A cumulus project: design and implementation," Rochester Institute of Technology, Report, 2008. [Online]. Available: \(\overline{\mathcal{Z}}\).

[198] L. A. Rahn, C. M. Pancerella, M. C.-C. Chen, W. S. K. Doyle, J. A. Nobel, T. Allison, J. Chase, B. Didier, Z. M. Djurisic, T. Elsethagen, M. Frenklach, W. H. Green, V. Gurumoorthi, D. Kodeboyina, D. Leahy, J. Li, D. Montoya, J. D. Myers, O. O. Oluwole, W. Pitz, R. Pinzon, B. Ruscic, K. Schuchardt, J. Song, L. Sun, G. von Laszewski, A. Wagner, and L. Xu, "Collaboratory for Multi-scale Chemical Science (CMCS): Project Final Report.," Tech. Rep., Jul. 2006. [Online]. Available:

[199] E. Puryear, D. Angulo, A. Schilling, K. Drew, and G. von Laszewski, "Comparing mass spectra," DePaul University CTI Tech Report, Tech. Rep., 2006, pp. 1–7.

ssspec-r

massspec

006-batch

eveloping

ndt-user

lworkflow

.d-portal

workflow

2002-gsfl

a-status

.d-create

.998-1dap

llection

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pc-92260

[200] C. Stejerean1, P. Siwamutita, E. D. Frank, C. Giometti, G. Babnigg, D. Angulo, K. Drew, and G. von Laszewski, "An End-to-End System for Organizing, Sharing Raw and Derived Mass Spectrometry Data," Tech. Rep., 2006. [Online]. Available: .

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[202] J. van Puymbrouck, D. Angulo, Drew, H. Kevin, A. Lee, D. Battre, A. Schilling, D. Jabon, and G. von Laszewski, "A Batch Import Module for an Empirically Derived Mass Spectral Database," *DePaul University CTI Tech Report*, 2006. [Online]. Available: Z.

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[204] G. von Laszewski and M. Hategan, "Java cog kit karajan/gridant workflow guide," Technical Report, Argonne National Laboratory, Argonne, IL, USA, Tech. Rep., 2005. [Online]. Available: \( \osd\_{\mathbb{c}}^{\mathbf{c}} \).

[205] —, Grid Workflow – An Integrated Approach, 2005. [Online]. Available: Z.
[206] D. Gannon, G. Fox, M. Pierce, B. Plale, G. von Laszewski, C. Severance, J. Hardin, J. Alameda, M. Thomas,

and J. Boisseau, "Grid portals: a scientist's access point for grid services," Tech. Rep., 2003.

[207] G. von Laszewski, "Java CoG Kit Workflow Concepts for Scientific Experiments," Argonne National Laboratory, Tech. Rep., 2003. [Online]. Available: \(\overline{\mathbb{Z}}\).

[208] S. Krishnan, P. Wagstrom, and G. von Laszewski, "GSFL: A workflow framework for grid services," *Preprint ANL/MCS-P980-0802 and Argonne National Laboratory*, vol. 9700, pp. 25–31, 2002. [Online]. Available: \(\overline{\mathcal{Z}}\).

[209] S. Verma, J. Gawor, G. von Laszewski, and M. Parashar, "Status of a Bridge between CORBA and Globus," Argonne National Laboratry, Tech. Rep., 2001. [Online]. Available: Z.

[210] O. F. Rana, A. Shaikhali1, and G. von Laszewski, "Creating and Managing Grid Services," Argonne National Lab, Argonne, IL, Technical Report, Aug. 2000. [Online]. Available:

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[214] A. G. Mohamed, G. C. Fox, G. von Laszewski, M. Parashar, T. Haupt, K. Mills, Y.-H. Lu, N.-T. Lin, and N.-k. Yeh, "Applications Benchmark Set for Fortran-D and High Performance Fortran," Center for Research on Parallel Computation, Rice University, P.O. Box 1892, Houston, TX 77251-1892, Tech. Rep. CRPC-TR92260, Jun. 1992. [Online]. Available: .

## SELECTED INVITED TALKS AND PRESENTATIONS

- 1. Research projects in Data Science, FAMU, Florida, Summer 2021.
- 3. BigData 2017 MIDAS and SPIDAL Tutorial . Geoffrey Fox, David Crandall, Judy Qiu, Gregor Von Laszewski, Shantenu Jha, John Paden, Oliver Beckstein, Tom Cheatham, Madhav Marathe, Fusheng Wang, Bari Italy February 13-14 2017 ☑ ■

- 4. Cloudmesh Virtual Cluster Management for Data-Intensive Applications, Gregor von Laszewski, DePy 2015 1st Annual Conference on Python applications in Data Analysis, Machine Learning, and Web, Chicago, Ill, May 29-30 2015. Video
- 5. Cloudmesh, HPCS2014 Halifax, Nova Scotia, CA, June 25-27, 2014
- 6. FutureGrid, OpenCirrus Meeting, Oct 2011, Georgia Tech
- 7. Panelist: Opportunities of Services Business in Cloud Age at Cloud2011, 7/8/2011
- 8. Green Computing, IUPUI, Indianapolis, IU Energy Conference, Aug 6-7, 2009.
- 9. Towards GreenIT, Indiana University, July, 2009.
- 10. Grids for Synchrotrons, ESRF Grenoble, , Dec 8, 2008.
- 11. Cyberinfrastucture Research. 2008, University of Albany
- 12. Scientific Workflows. 2008, Research Computing and NYSGrid via Access Grid, Rochester Institute of Technology
- 13. Cyberinfrastucture Workflows. 2008, CCRG Rochester Institute of Technology
- 14. Cyberinfrastucture Research. 2007, IBM Raleigh
- 15. Grid Workflows, 2007, Georgia Tech
- 16. Grid Workflows, 2007, University of Buffalo
- 17. CoG Kits: an opportunity for Collaboration, October 2006, Southern Illinois University
- 18. The use of XML in Grids, September 2006, Loyola University Evolution of Grid Computing with education experiences, SC07 Educational Planning Workshop, July 27-30, Argonne National Laboratory.
- 19. Active Thermochemical Table Infrastructure, CMCS Workshop, Urbana, IL, June 7-8, 2006.
- 20. Scientific Process Management, NIH, Washington DC, Feb. 3, 2006.
- 21. April 2005, Georgia Tech, Java CoG Kit
- 22. Grid Workflow with the Java CoG Kit 4. TACC, Austin, TX, 13 May 2005.
- 23. Grid Programming Patterns with the Java CoG Kit 4. GlobusWorld, Boston, Massachusetts, 7-11 February 2005.
- 24. Workflow support in the Java CoG Kit 4. Boston, Massachusetts, 7-11 February 2005.
- 25. Keynote: CoG Kit Abstractions. Workshop on Grid Application Programming Interfaces in conjunction with GGF12, Brussels, Belgium, 20 September 2004. (Keynote).
- 26. Java cog kit workflow abstractions. GGF Workshop Management Working Group, GGF11 The Eleventh Global Grid Forum, Honolulu, Hawaii USA, 6-10 June 2004. (Presentation).
- 27. GridAnt. GlobusWorld, San Francisco, 20 January 2004.
- 28. Grid computing. Illinois Institute of Technology, October 2004.
- 29. The State of Grid Computing in the U.S.A. In Grid Symposium of the Ministry of Science, Germany. Wissenschaftszentrum, Bonn, 28 November 2002. (Invited Talk).
- 30. The Science of Collaboratories Workshop Series The State of Collaboratory Tools and Technologies, Sponsored by the University of Michigan and the National Science Foundation. Ann Arbor, Michigan, 19-20 July 2001. (Invited Participant).
- 31. HPC Consortium Meeting, GridSIG, Sun Microsystems. Status of the Globus Project, Heidelberg, Germany, 19-20 June 2001. (Invited Talk).
- 32. The Use of Java in High Performance Computing. In EuroPar 2000, Munich, Germany, 30 August 2000. (Panelist).

- 33. Application Programming in the Grid. Europar 2000, Munich, Germany, August 28 September 1 2000.
- 34. Unicore and Globus. Unicore Meeting, Juelich, Germany, Sept 2000.
- 35. Building Portals with Java. Computing Portals Workshop, San Francisco, CA, 78 December 2000.
- 36. Gregor von Laszeswki. Using Java in Grids. In High Performance Computing and Java, number 284 in Seminar 341, Dagstuhl, Germany, 2025 August 2000. International Conference and Research Center for Computer Science. (Invited Talk)
- 37. Building Portals with CoG. Science Portals Workshop, Urbana, IL, 22-23 September 1999.
- 38. Information Services for the Common Component Architecture. Knoxville, TN, July 1999.
- 39. Application programming in the Grid. Aachen, Germany, September 1999.
- 40. Studying and Working in the U.S.A. Aachen, Germany, September 1999.
- 41. A Grid-based Computing Portal. Alliance Chemistry Portals Meeting, Urbana, IL, August 15 2000.
- 42. Using Globus and Java on Clusters and Grids. In International Workshop on Global and Cluster
- 43. Computing (WGCC2000), Tsukuba, Japan, 15-17 March 2000. (Invited Talk).
- 44. Panel on Commodity Technologies and Grid, ISCOPE 99, December 1999. (Panelist).
- 45. The Globus Grid Infrastructure. Julich, Germany, September 1999. (Invited Talk).
- 46. Dattor, Gridforum, and Computing Portals. Julich, Germany, September 1999. (Invited Talk).
- 47. Recent Development in the Globus Project. In 3rd HLRS Metacomputing Workshop, Stuttgart Germany, 6-7 June 2000. (Invited Talk).
- 48. JavaGrande Meeting at Supercomputing. Orlando, FL, November 1998. (Panelist).
- 49. 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. (Invited Talk).
- 50. Reusable Components of Globus-J, October 1998. Workshop of Desktop Access to Remote Resources,
- 51. JavaGrande Forum and Argonne National Laboratory, Chicago, IL.
- 52. SC98 BoF: Java Grande. , Orlando, FL, November 1998. (Panelist).
- 53. 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.
- 54. The Globus Project: A Metacomputing Toolkit for Multidisciplinary Applications. In 1st Symposiumon 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. (Invited Talk).
- 55. Using the Globus Metacomputing Toolkit for Seamless Computing. Supercomputing Center at ECMWF, Reading, UK, December 1997. (Invited Talk).
- 56. Introduction to Java. Illinois Institute of Technology, May 1997.
- 57. Introduction to Genetic Algorithms. Argonne National Laboratory, Summer Program, July 1998.
- 58. Parallel Optimal Interpolation. NASA Goddard Space Flight Center, June 1996.

# SELECTED SEMINARS AND COLLOQUIA

- 1. Tutorial: FutureGrid TG11, 2011
- 2. Overview of FutureGrid, PTI, 2010.
- 3. JavaScript CoG Kit, Teragrid 2009.
- 4. Building Commodity Grids. In CHEF Workshop. University of Michigan, Ann Arbor, 1415 October 2002.
- 5. Grid Computing: A Collaborative Approach. In Collaborative and Distance Learning Technologies (CDLT) Day at U.S. Army Engineering Research and Development Center (ERDC), Vicksburg, MS, 29 October 2002. (Invited Talk).
- Gregor von Laszewski, Nestor J. Zaluzec, and Xian He Sun. Computationally Mediated Experimental Science.
   The Illinois Institute of Technology Inter-professional Projects Program, IPRO305, Fall 2002. A project-oriented class.
- 7. Gregor von Laszewski and Xian He Sun. CS595: Grid and Ubiquitous Computing. Illinois Institute of Technology, Chicago, IL, Spring 2002. Course material, teaching, and project supervision.
- 8. Gregor von Laszewski. Java CoG Kit Tutorial at the Joint ACM Java Grande ISCOPE 2002 Conference. Seattle, Washington, 3 November 2002.
- 9. Gregor von Laszewski. The Importance of CoG Kits for Grid Users. Globus Retreat, Chicago, IL, 2001.
- 10. Gregor von Laszewski. The Java Cog Kit. Globus Retreat, Chicago, IL, 2001.
- 11. Global Grid Forum. Introduction to the Global Grid Forum Information Services Working Group, Amsterdam, The Netherlands, 2 March 2001.
- 12. IPDPS 2001. Grid Computing, Globus, and Java Interface to the Grid, San Francisco, CA, 27 April 2001. 2.
- 13. Vladimir Getov, Jose E. Moreira, Roldan Pozo, and Gregor von Laszewski. Java for High-Performance Computing. In Java One Conference and Java Grande Conference, San Fransisco, CA, 2 June 2001.
- 14. International Symposium in High Performance and Distributed Computing. High Performance and Grid Programming in Java and Python, San Francisco, CA, 6 August 2001. Gregor von Laszewski and Steve Fitzgerald. The Globus Grid Programming Toolkit. Tutorial at SC99, Portland, OR, 1319 November 1999.
- 15. Gregor von Laszewski and Steven Fitzgerald. The Globus Grid Programming Toolkit. The 7th IEEE Symposium on High-Performance Distributed Computing, July 1998.
- 16. Introduction to the Metacomputing Toolkit. High-Performance Computing Tutorial, The National Center for Supercomputing Applications, University of Illinois at Urbana Champaign, April 1998.
- 17. 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.
- 18. Using LDAP in the real world. De Paul University, Chicago, IL, January 2000.
- 19. Gregor von Laszewski. The Java CoG Kit. Globus Retreat, Pittsburgh, PA, July 30 August 1 2000

#### SELECTED COMMUNITY ACTIVITIES

My community activities involve a wide variety of activities, including program committees, grant reviews, community education, advisory board. Most recently, however, I have refocussed the community activities while spending my time voluntarily on educational activities of the community. This includes extraordinary efforts with STEM students, undergraduates and Graduate students. This effort has been most rewarding as I have seen many students accelerating in their educational quest and excellence manifested by several awards.

#### Selected Project and Proposal Review Panel Activities

- 1. STEM: Taught Programming to a team of elementary school children 5th and 6th graders that won 2nd place in the regional FLL competition 2015 (remarkable due to the ages while the winning team was high school)
- 2. Reviewer for Fonds National de la Recherche Luxembourg, 2014
- 3. Member of the International Advisory Board of Cybera, Alberta, CA, 2008 present.
- 4. Member of the Unicore Review Committee of the German Ministry of Science, Germany. Wissenschaftszentrum, Bonn, Nov. 27 2000-2002.
- 5. Review Committee for The Engineering and Physical Sciences Research Council (EPSRC), UK. 🗹.
- 6. NSF Review Panels, 2004.
- 7. DOE proposal reviews, 2002, 2003, 2004, 2005, 2006.
- 8. GCE08 Steering Committee

#### Chair and Steering Committee

- 1. 2016 IEEE International Conference on Cloud Engineering Workshop (IC2EW).
- 2. 1109/IC2EW.2016.66
- 3. CCGrid2015, CCGrid2016, Committee Member
- 4. CloudCom 2014, Track Chair
- 5. ICCCT-2014, 5th International Conference on Computer and Communication Technology, Reviewer
- 6. CAC 2013, Track Chair
- 7. Workshop on Federated Clouds 2012 and 8th OpenCirrus Summit, (Co-Chair, Program Co-chair, Proceedings editor)
- 8. Dagstuhl Seminar Mar 2009 (Co-Chair).
- 9. GCE08 in conjunction with SC08, co-Chair
- 10. GCE07 Steering Committee
- 11. Grid 2007, Program vice-chair, Austin, TX collocated with Cluster 2007, Sept 17 21 in 2007
- 12. GCE06 in conjunction with SC06, Chair
- 13. Minisymposium on Grid Workflow, Globus World, San Francisco, 20 January 2004. Chair.
- Minisymposium on Grid Workflow. Gregor von Laszewski and Ewa Delman. San Francisco, CA, 2023 January 2003. Chair.
- 15. Global Grid Forum Grid Information Services Working Group/Area Chair. 2001 2002.
- 16. Grid Forum Grid Information Services Working Group/Area Chair. 2000 2001.
- 17. GIS Working Group. GGF 2, Vienna, VA, July 1518 2001. Chair.
- 18. GIS Working Group. GGF 1, Amsterdam, NL, March 29 2001. Chair.
- Joint ACM Java Grande ISCOPE 2001 Conference. Stanford University, California, June 24 2001. Committee and Tutorials Chair.
- 20. Second Workshop on Desktop Access to Remote Resources. Sandia National Laboratory, Albuquerque, NM, 15-16 February 1999. Steering Committee.
- 21. First Workshop Desktop Access to Remote Resources, 89th October 1998. Steering Committee and Chair.

- 22. Computing Portals Workshop and 3rd International Workshop on Desktop Access to Remote Resources. Together with Computing Portals Working Group (Datorr), Java Grande Forum, and The 3rd International Symposium on Computing in Object-Oriented Parallel Environments, San Francisco, California, U.S.A., 7 December 1999. Steering Committee and Chair.
- 23. IEEE Task Force on Cluster Computing. 1998-2000. Advisory Committee.
- 24. SC98 BoF: Desktop Access to Remote Resources. Gregor von Laszewski. Orlando, FL, November 1998.
- Organizer of the BoF. Supercomputing SC93. Portland, OR, Nov. 15-19 1993. Best Student Paper Selection Committee.

#### Selected Committee Review Activities

- 1. Committee Co-chair CloudCom2012 in the topic Cloud Computing on HPC, 2014.
- 2. 4th Workshop on Scientific Cloud Computing (ScienceCloud) 2013 June 17th, 2013, New York City, NY, USA (Committee).
- 3. IEEE CloudCom 2012, 2011, 2010 (Committee).
- 4. ITSM2012 (Committee)
- 5. PPAM2011 (Committee).
- 6. TerraGrid 2010 (Awards Committee)
- 7. FGMMS2010 (Committee).
- 8. CCGrid 2010, 2008, 2007, 2006, 2005 (Committee) in conjunction with SC'.
- 9. GCE, 2010, 2009, 2005 (Committee).
- 10. ICPADS, 2010 (Committee).
- 11. IGCC 2010 (Committee).
- 12. IPDPS 2009, 2008 (Committee).
- 13. Grid 2009, 2007 (Committee).
- 14. Cluster 2009
- 15. TeraGrid 2009 (Student Mentor).
- 16. GCE08 (Committee and co-Chair).
- 17. Euro-Par 2008 (Committee).
- 18. ICPADS'2007. 13th International Conference on Parallel and Distributed Systems, December 5 7, 2007 at National Tsing Hua University, Hsinchu, Taiwan. (Committee).
- 19. High-Performance Computing Symposium (HPC 2007) Norfolk, VA (Committee).
- 20. CCGrid2007 (Committee).
- 21. HPC 2007: High Performance Computing Symposium, Z, March 25-29, 2007 (Committee)
- 22. 2-nd IEEE International Conference on e-Science and Grid Computing, Dec. 4- 6, 2006, Amsterdam, Netherlands, (Committee).
- 23. IEEE 2006 International Symposium on Modern Computing, 3-6 October 2006, Sofia, Bulgaria, (Committee)
- 24. Grid2006, (Committee)
- 25. ICCGI06 International Multi-Conference on Computing in the Global Information Technology, March 15, August 1-3, 2006, Bucharest, Romania, (Advisory Committee)
- 26. Supercomputing, SC06, SC03, SC00, SC98, SC97, SC95.

- 27. PPAM 2005, Sixth International Conference on Parallel Processing and Applied Mathematics.
- 28. IPDPS, 19th IEEE International Parallel and Distributed Processing Symposium. Denver, Colorado, 48 April 2005.
- 29. EuroPar 2006, 2005
- 30. Coordination Abstractions for Worldwide Computing, Software Technology Mini-Track, HICSS-38, Jan. 2005.
- 31. Third International Symposium on Automated Technology for Verification and Analysis, Taipei, Taiwan, 4-7 October 2005.
- 32. International Conference on eScience and Grid Technologies 2005. Melbourne, Australia, 5-8 December 2005.
- 33. 6th IEEE/ACM International Workshop on Grid Computing (Grid 2005) held in conjunction with SuperComputing 2004. Seattle, WA,Nov. 2005.
- 34. Challenges of Large Applications in Distributed Environments (CLADE). Honolulu, HI, 7 June 2004.
- 35. Workshop on Component Models and Systems for Grid Applications, held in conjunction with ICS 2004: 18th Annual ACM International Conference on Supercomputing, Saint-Malo, France, June 26-July 1, 2004.
- 36. EuroPar 2004. Pisa, Italy, 31 Aug.3rd Sept. 2004.
- 37. BioGrid'04, Second International Workshop on Biomedical Computations on the Grid, held in conjunction with, 4-th IEEE/ACM International Symposium on Cluster Computing and the Grid, Chicago, Illinois, USA, April 19-22, 2004
- 38. Workshop on Component Models and Systems for Grid Applications, Held in conjunction with ICS 2004, 18th Annual ACM International Conference on Supercomputing. SaintMalo, France, June 26 July 1 2004.
- 39. 5th IEEE/ACM International Workshop on Grid Computing (Grid 2004) held in conjunction with SuperComputing 2004. Pittsburgh, USA, 8 November 2004.
- 40. Advanced Computing and Communications ADCOM2004. Ahmedabad Gujarat, India, 15-18 December 2004.
- 41. IPDPS 2003, International Parallel and Distributed Processing Symposium (IPDPS). Nice, France, 26 April 2003.
- 42. International Conference on Machine Learning and Cybernetics 2003.
- 43. The Eleventh International Conference on Parallel Architectures and Compilation Techniques. Charlottesville, Virginia, September 22-25 2002.
- 44. SAINT2002. The 2002 Symposium on Applications and the Internet. Nara City, Nara, Japan, 28 Jan -1 Feb 2002.
- 45. The 2002 Symposium on Applications and the Internet. Nara City, Nara, Japan, 28 Jan 1 Feb 2002.
- 46. Joint ACM Java Grande and ISCOPE 2002 Conference. Seattle, Washington, November 3-5 2002.
- 47. CCGrid 2002, 2nd IEEE/ACM International Symposium on Cluster Computing and the Grid. Berlin, Germany, 21-24 May 2002.
- 48. 1st IEEE/ACM International Symposium on Cluster Computing and the Grid. Brisbane, Australia, 15-18 May 2001.
- 49. EuroPar 2001. Manchester, UK, http://europar.man.ac.uk/, 2831 August 2001.
- 50. IPDPS 2001, International Parallel and Distributed Processing Symposium . San Fransisco, CA, 27 April 2001.
- 51. Second International Workshop on Infrastructure for Agents, MAS, and Scalable MAS. The 5th International Conference on Autonomous Agents, Montreal, Canada, May 28 June 1 2001.
- 52. Java in High-Performance Computing at HPCN Europe 2001 Conference. Amsterdam, The Netherlands,
- 53. ACM Java Grande 2000 Conference. San Francisco, California, June 3-5 2000.

- 54. International Workshop on Metacomputing Systems and Applications. Toronto, August 2124 in conjunction with the 29th International Conference on Parallel Processing, August 21 2000.
- 55. Ninth SIAM Meeting on Parallel Processing. Minisymposium on Innovative Wide Area Applications, San Antonio, TX, 2224 March 1999. Session Host.
- 56. International Conference on Parallel and Distributed Processing Techniques and Applications. Las Vegas, Nevada, USA, June 30 July 2 1999.
- 57. International Telemedical Information Society (ITIS) Symposium, 1998.
- 58. PDPTA 1998. Las Vegas, Nevada, August 1998. Session Host.
- 59. Supercomputing SC93. Portland, OR, Nov. 15-19 1993.
- 60. Java for High-Performance Networking, 1997, 1998, 1999, 2000, 2001.

#### Journal Article Reviews

- 1. Journal for Grid Computing.
- 2. Concurrency and Computation: Practice and Experience.
- 3. IEEE Concurrency.
- 4. Parallel Computing
- 5. Computing in Science and Engineering
- 6. Journal of International Telemedical Information Society (ITIS) Letters.

#### SOFTWARE DEVELOPED

## Selected Current Software and Online Projects

Defining schemas for the grid information services

[215] G. von Laszewski and G. Fox, Cybertraining publications, Web Page, Aug. 2021. [Online]. Available: 🗹.

[216] G. Laszewski, Cyberaide Bookmanager, PyPI and GitHub, Feb. 2020. [Online]. Available: 🗹.

[210] G. Laszewski, Cybertatae Dominanager, Tyl Fand Gibildo, Feb. 2020. [Online]. Available. C.

[217] G. von Laszewski, Cloudmesh Community, GitHub, Feb. 2020. [Online]. Available: 🗹.

[218] G. Laszewski, Cloudmesh Code Repositories, GitHub, Feb. 2020. [Online]. Available: 🗹.

[219] Digital Science Lab, FutureSystems at Indiana University, 2015. [Online]. Available: 🗹.

- 1. More than 70 projects at Cloudmesh Code Repositories, 2021-04,
- 2. More than 174 projects at Cloudmesh Community 2021-04,
- 3. Cloudmesh for SDSC virtual cluster project (Architect of client)
- 4. FutureGrid Software (Architect)
- 5. FutureGrid Image Management (Architect)
- 6. FutureGrid Cloud Accounting (Architect)
- 7. TAS XDMoD (accounting report generator, software science impact)

#### Selected Completed projects

AdHoc Workflows; Grid Desktop GridFTP user interface; GridRLS user interface; GridAnt; Grid Certificate Authority; Qstat Monitor for Cobalt and PBS queuing systems; GSFL – Grid Service Flow Language; Cyberaide; Gridshell; Grid MS Project; Java CoG Kit; GridScript; GridWorkflow (Karajan); GridTorrent; Adaptive workflows for threat management analysis; Real-time analysis of advanced photon source data; Coordination of fast nuclear reactor simulations; Developed a sophisticated Metacomputing environment allowing seamless uses of multiple supercomputers; Developed one of the very first parallel Genetic algorithms for k-way Graph Partitioning.

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- resystems