

Peggy Lindner, Ph.D.

Department of Information & Logistics Technology
University of Houston
Houston, TX 77204 USA
Phone: 713-743-4581

Email: plindner@uh.edu
URL: <https://peggylind.github.io/>

Appointments

2019-current	Assistant Professor, Computer Information Systems, University of Houston
2018-2019	Associate Director for Educational Programs, <i>Hewlett Packard Enterprise Data Science Institute</i> , University of Houston
2013-2019	Research Assistant Professor, Department of Mechanical Engineering & Honors College, <i>Center for Advanced Computing & Data Science (CACDS)</i> , University of Houston
2009-2012	Research Assistant Professor, <i>Department of Computer Science</i> , University of Houston
2012	Visiting Scientist, Department of Surgery, <i>The Methodist Hospital Research Institute</i> , Houston, TX
2007-2012	Lab Manager, <i>Computational Physiology Lab</i> , University of Houston
2001-2007	Research Associate, <i>High Performance Computing Center (HLRS)</i> , Stuttgart, Germany

Education

2000	MSc in Geotechnology Mining, Freiberg University of Mining and Technology, Germany
2007	PhD in Mechanical Engineering, University of Stuttgart, Germany

Personal Statement

I am an Assistant Professor in Computer Information Systems with broad expertise in data management and analysis. My background is in geotechnical engineering and high-performance computing. I have built my information science research career with a focus on applications in the social sciences and digital humanities. I'm also directing the Data Analytics in Student Hands (DASH) program at the UH Honors College, where I develop curriculum and training materials suitable for a diverse audience.

Publications

JOURNAL ARTICLES

C. Samaniego, B. Dirr, M. Kazmi, P. Lindner, D. T. Kong, E. Jeff-Eke, and C. Spitzmueller. Higher Research Productivity = More pay? Gender Pay-for-Productivity Inequity Across Disciplines. *Scientometrics*, in press

- L. Hellmueller, V. Hase, and P. Lindner. Terrorist Organizations in the News: A Computational Approach to Measure Media Attention Toward Terrorism. *Mass Communication and Society*, pages 1–24, June 2021. ISSN 1520-5436, 1532-7825. doi: 10.1080/15205436.2021.1936068. URL <https://www.tandfonline.com/doi/full/10.1080/15205436.2021.1936068>
- G. Toti, R. Vilalta, P. Lindner, B. Lefer, C. Macias, and D. Price. Analysis of correlation between pediatric asthma exacerbation and exposure to pollutant mixtures with association rule mining. *Artificial intelligence in medicine*, 74:44–52, 2016a. Publisher: Elsevier
- I. Garza, H. Montakhabi, P. Lindner, P. Tsiamyrtzis, J. Swanson, L. MacBride, T. Krouskop, and I. Pavlidis. The Face of Migraine; Thermal Imaging Revisited (P06.154). *Neurology*, 80(7 Supplement):P06.154–P06.154, 2013. ISSN 0028-3878. URL https://n.neurology.org/content/80/7_Supplement/P06.154
- I. Pavlidis, P. Tsiamyrtzis, D. Shastri, A. Wesley, Y. Zhou, P. Lindner, P. Buddharaju, R. Joseph, A. Mandapati, B. Dunkin, and others. Fast by nature-how stress patterns define human experience and performance in dexterous tasks. *Scientific Reports*, 2:305, 2012. Publisher: Nature Publishing Group
- Y. Zhou, P. Tsiamyrtzis, P. Lindner, I. Timofeyev, and I. Pavlidis. Spatiotemporal smoothing as a basis for facial tissue tracking in thermal imaging. *IEEE Transactions on Biomedical Engineering*, 60(5):1280–1289, 2012. Publisher: IEEE
- P. Lindner, E. Gabriel, and M. M. Resch. GCM: a grid configuration manager for heterogeneous grid environments. *International Journal of Grid and Utility Computing*, 1(1):4–12, 2005. Publisher: Inderscience Publishers

REFERRED CONFERENCE PUBLICATIONS

- K. Neumann and P. Lindner. Digital Numismatics and Data Visualization for Ancient Antioch. University of Warsaw, Sept. 2022
- C. Bronk, A. Lendasse, P. Lindner, D. Wallach, and B. Hammer. Machine Learning for Measuring and Analyzing Online Social Communications. In *ESANN 2021 proceedings*, Online Event, Oct. 2021. ISBN 978-2-87587-082-7
- M. Graham, M. Mehra, P. Lindner, E. Velasco Moireira, S. Shresta, J. H. Flynn, R. Sheesly, and S. Usenko. Optimization of an Algorithm Using Aerosol Optical Properties to Investigate the Influence of Biomass Burning on an Urban Atmosphere – (BC)2 2021 Field Campaign. Oct. 2021
- L. Hellmueller, L. Camaj, and P. Lindner. Mediating the 2020 U.S. Political Debates on Social Media: The impact of message function and visual framing on political deliberation on news outlets’ Facebook pages. virtual, May 2020
- M. Kazmi, X. Wen, C. Samaniego, A. Tsao, P. Lindner, and C. Spitzmueller. How Leadership Can Reduce the Gender-Safety Priority Relationship. online, Sept. 2020. URL <https://app.oxfordabstracts.com/events/987/program-app/submission/148625>
- M. Bagheri, H. Zhao, M. Sun, L. Huang, S. Madasu, P. Lindner, and G. Toti. Data Conditioning and Forecasting Methodology using Machine Learning on Production Data for a Well Pad. In *OTC-30854-MS*, page 17, OTC, May 2020. Offshore Technology Conference. ISBN 978-1-61399-707-9. doi: 10.4043/30854-MS. URL <https://doi.org/10.4043/30854-MS>. Journal Abbreviation: OTC-30854-MS
- M. Saxena, S. Jha, S. Khan, J. Rodgers, P. Lindner, and E. Gabriel. Comparison of MPI and Spark for Data Science Applications. New Orleans, LA, USA, 2020

- L. Hellmueller, V. Hase, and P. Lindner. Terrorism in the News: Explaining Mediated Visibility of Organized Violence. In *69th Annual International Communications Association (ICA) Conference*, 2019. event-place: Washington, D.C
- A. Amritkar, J. Ebalunode, M. Huarte-Espinosa, P. Lindner, P. G. Rondón, and A. Prosperetti. Vistas in Advanced Computing. Denver, CO, Nov. 2017
- H. Ayyalasomayajula, E. Gabriel, P. Lindner, and D. Price. Air quality simulations using big data programming models. In *2016 IEEE Second International Conference on Big Data Computing Service and Applications (BigDataService)*, pages 182–184. IEEE, 2016
- G. Toti, R. Vilalta, P. Lindner, and D. Price. Effect of the Definition of Non-Exposed Population in Risk Pattern Mining. In *5th Workshop on Data Mining for Medicine and Healthcare*, page 19, 2016b
- I. Uyanik, P. Lindner, P. Tsiamyrtzis, D. Shah, N. V. Tsekos, and I. T. Pavlidis. Applying a level set method for resolving physiologic motions in free-breathing and non-gated cardiac mri. In *International Conference on Functional Imaging and Modeling of the Heart*, pages 466–473. Springer, 2013
- A. Wesley, P. Lindner, and I. Pavlidis. Eustressed or distressed? Combining physiology with observation in user studies. In *CHI'12 Extended Abstracts on Human Factors in Computing Systems*, pages 327–330. 2012
- P. Lindner, E. Gabriel, and M. M. Resch. Performance prediction based resource selection in grid environments. In *International Conference on High Performance Computing and Communications*, pages 228–238. Springer, 2007
- F. Börs, N. Currle-Linde, P. Lindner, R. D. Schmid, and J. Pleiss. High-throughput molecular dynamics simulations: Long and short range effects of mutations on substrate specificity. In *German Conference on Bioinformatics 2004, GCB 2004*. Gesellschaft für Informatik eV, 2004
- J. Almond and P. Lindner. An Integrated Global Service for File Transfer and Management in a Network (FTM). In *PDPTA*, pages 1063–1067, 2004
- N. Currle-Linde, F. Boes, P. Lindner, J. Pleiss, and M. M. Resch. A management system for complex parameter studies and experiments in grid computing. In *Parallel and Distributed Computing and Systems: Proceedings of the 16th IASTED International Conference*, 2004
- E. Gabriel, R. Keller, P. Lindner, M. S. Müller, and M. M. Resch. Software Development in the Grid: The DAMIEN tool-set. In *International Conference on Computational Science*, pages 235–244. Springer, 2003
- P. Lindner, N. Currle-Linde, M. M. Resch, and E. Gabriel. Distributed application management in heterogeneous GRIDS. In *Euroweb 2002 conference*, pages 1–10, 2002

Grants and sponsored projects

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| 2021-2024 | Spitzmueller, C. (Principal), Madera, J. (Co-Principal), Henderson, E. (Co-Principal), Lindner, P. (Co-Principal at UH), "External review letters in promotion and tenure decision making: validity and fairness," <i>Collaborative proposal National Science Foundation (NSF)</i> , \$2,000,005.00. |
| 2019-2021 | Spitzmueller, C. (40%) (Principal), Lindner, P. (30%) (Co-Principal), Flynn, R. (30%) (Co-Principal), "Employee well-being and mindfulness as predictors of process and personal," Sponsored by National Academy of Science, Engineering and Medicine, \$828,113.00. |
| 2021-2022 | Lindner, P. (Co-Principal) (25%), Neumann, K. (50%) (Co-Principal), Rodwell, E. A. (25%) (Co-Principal), "Digital Projects for the Public: Prototyping Award," <i>National Endowment for the Humanities (NEH)</i> , \$98,095.00. |
| 2020-2021 | |

	Lindner, P. (Co-Principal), Vaid, S. (Principal), Feinberg, F. (Co-Principal), "Impact of Multiple Digital Sellers on Customer Utility," <i>Social Sciences and Humanities Research Council (SSHRC) Canada</i> , \$37,364.00.
2021	Neumann, K. (Co-Principal), Lindner, P. (Co-Principal), Rodwell, E. A. (Co-Principal), "" <i>Loeb Classical Library Foundation Fellowship, Harvard University</i> , \$17,650.00.
2021-2022	Lindner, P. (10%) (Co-Principal), Flynn, J. H. (45%) (Principal), Wang, Y. (45%) (Co-Principal), "Black and Brown Carbon (BC) ₂ monitoring in Houston and El Paso in the 2021 Ozone Season," <i>Texas Commission on Environmental Quality (TCEQ)</i> , \$555,000.
2021-2022	Lindner, P. (10%) (Co-Principal), Flynn, J. H. (90%) (Principal), "Monitoring related to ozone formation in and ozone and particulate matter transport into the Houston Region and the Dallas-Fort Worth region," <i>Texas Commission on Environmental Quality (TCEQ)</i> , \$396,358.00.
2020-2021	Lindner, P. (10%) (Co-Principal), Flynn, J. H. (45%) (Principal), Wang, Y. (45%) (Co-Principal), "Black and Brown Carbon (BC) ₂ monitoring in El Paso and Houston in 2020," <i>Texas Commission on Environmental Quality (TCEQ)</i> , \$808,295.00.
2020-2025	Lindner, P. (10%) (Co-Principal), Flynn, J. H. (90%) (Principal), "Gulf of Mexico Region (GOMR) Coastal ambient Air quality monitoring: a pilot study", <i>Ambilabs / Bureau of Ocean Energy Management</i> , \$141,197.00.
2021	Kristina, N. (34%) (Co-Principal), Lindner, P. (33%) (Co-Principal), Rodwell, E. A. (33%) (Co-Principal), "DRC Sponsored Projects: Finding Connection in Ancient Syria" <i>University of Houston Libraries</i> , \$6,500.00.
2021	Madrid-Morales, K. (50%) (Principal), Lindner, P. (50%) (Co-Principal), "Development Grants: A Multilingual Database of Digital News in 54 African Countries" <i>University of Houston Libraries</i> , \$6,500.00.
2020	Hellmueller, L. (34%) (Principal), Camej, L. (33%) (Co-Principal), Lindner, P. (33%) (Co-Principal), "Research Progress Grant - Early Career Televised Debates 2020: The quality of real-time political discussion on media organizations' Facebook pages," <i>University of Houston, College of Liberal Arts & Social Sciences</i> , \$7,669.85.
2020	Neumann, K. (50%) (Co-Principal), Lindner, P. (50%) (Co-Principal), "Development Grants: Finding Connection in Ancient Syria," <i>University of Houston Libraries</i> , \$6,500.00.

Teaching

Fall 2022	CIS 4339: Enterprise Application Development
Spring 2022	CIS 4339: Enterprise Application Development
Fall 2021	CIS 4339: Enterprise Application Development
Spring 2021	CIS 3368: Advanced Information System Development
Fall 2020	CIS 6371: Data Analytics Solutions
	CIS 3368: Advanced Information System Development
Spring 2020	CIS 2348: Information System Application Development
	CIS 6397 Selected Topics: Introduction to Textmining
Fall 2019	CIS 2348: Information System Application Development
Spring 2018	ENGI 6397 Selected Topics: Data Science Projects, co-taught with G. Toti
Fall 2018	R for Data Science, Center for Advanced Computing and Data Science (CACDS), not-for-credit course
Spring 2018	HON 4397 Selected Topics: Introduction to Digital Humanities

Service to the profession

Community service: Advisory Board member, Digital Research Commons (DRC) University of Houston, 2018-current

Conference service: Finance Chair, IEEE International Conference on Advanced Video and Signal Based Surveillance, Santa Fe, New Mexico, September 1-3, 2008

Community service: Member Association of Computing Machinery (ACM), 2019-current, Member of Global Grid Forum (GGF), 2003-2005

Mentoring: Director DASH (Data Analytics in Student Hands) at the University of Houston