JEAN LUCA BEZ

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Research Scientist at Lawrence Berkeley National Laboratory (LBNL), USA. His work centers on optimizing data management and I/O performance to support scientific workflows that increasingly integrate AI. By investigating data access patterns, automatic tuning, and storage solutions, he aims to ensure massive datasets are ready for disruptive AI technologies, enabling researchers to leverage both new and historical data for scientific discovery.

EXPERIENCE

Lawrence Berkeley National Laboratory (LBNL, USA) *March 2023 – Present*
Career-Track Data Management Research Scientist

Lawrence Berkeley National Laboratory (LBNL, USA) *May 2021 – March 2023*
Postdoctoral Scholar in Scientific Data Management

Barcelona Supercomputing Center (Barcelona, Spain) *August 2019 – February 2020*
Visiting Researcher / Doctoral Stay

Inria Centre de Recherche Grenoble Rhône-Alpes (Montbonnot, France) *January 2017 – February 2017*
Visiting Researcher (Datamove)

EDUCATION

Federal University of Rio Grande do Sul (UFRGS) *February 2017 – May 2021*
Doctorate in Computer Science

"Dynamic Tuning and Reconfiguration of the I/O Forwarding Layer in HPC Platforms" (Honors)
Advisor: Prof. Dr. Philippe O. A. Navaux (UFRGS)
Co-Advisor: Dr. Toni Cortes (Universitat Politècnica de Catalunya / Barcelona Supercomputing Center)

Federal University of Rio Grande do Sul (UFRGS) *February 2015 – January 2017*
Master in Computer Science

"Evaluating I/O Scheduling Techniques at the Forwarding Layer and Coordinating Data Server Accesses"
Advisor: Dr. Philippe O. A. Navaux (UFRGS)

Universidade Regional Integrada do Alto Uruguai e das Missões (URI) *February 2010 – February 2015*
Bachelor in Computer Science

"Implementação de Técnicas de Tolerância a Falhas no URI Online Judge"
(Applying Fault Tolerance Techniques in URI Online Judge)
Advisor: Prof. Msc. Paulo Ricardo Rodegheri (URI)

PUBLICATIONS

Journals

J1 Salimiparsa, A., Lewis, N., **Bez, J. L.**, Byna, S., *A 360° Survey on Reconfigurability of HPC Storage Systems for Efficient I/O,*. ACM Comput. Surv. (*Accepted*)

J2 Hiniduma, K., **Bez, J. L.**, Byna, S., *Data Readiness for AI: A 360-Degree Survey*. ACM Comput. Surv. 57, 9, Article 219 (September 2025), 39 pages. https://doi.org/10.1145/3722214

J3 Lewis, N., **Bez, J. L.**, Byna, S., *I/O in Machine Learning Applications on HPC Systems: A 360-degree Survey*. ACM Comput. Surv, 2025, https://doi.org/10.1145/3722215

J4 **Bez, J. L.**, Byna, S., Ibrahim, S. *I/O Access Patterns in HPC Applications: A 360-Degree Survey*. ACM Computing Surveys, 2023, https://doi.org/10.1145/3611007

J5 **Bez, J. L.**, Tang, H., Breitenfeld, S., Zheng, H., Liao, W-K., Hou, K., Huang, Z., Byna, S. *h5bench: A Unified Benchmark Suite for Evaluating HDF5 I/O Performance on Pre-Exascale Platforms*. Concurrency and Computation: Practice and Experience, 2024, https://doi.org/10.1002/cpe.8046

J6 Carneiro, A. R., **Bez, J. L.**, Osthoff, C., Schnorr, L. M., Navaux, P. O. A. *Uncovering I/O Demands on HPC Platforms: Peeking Under the Hood of Santos Dumont*. Journal of Parallel and Distributed Computing (JPDC), 2022, https://doi.org/10.1016/j.jpdc.2023.104744

J7 **Bez, J. L.**, Zanon Boito, F., Nou, R., Miranda, A., Cortes, T., Navaux, P. O. A. (2020). *Adaptive request scheduling for the I/O forwarding layer using reinforcement learning*. Future Generation Computer Systems, 112, 1156–1169. https://doi.org/10.1016/j.future.2020.05.005

J8 Zaffalon, F., Prisco, A., Souza R., **Bez, J. L.**, Tonin, N., Penna, R. A., Botelho, S. *Estudo Comparativo entre Modelos que Estimam a Habilidade dos Estudantes em Ambientes Virtuais de Programação (Comparative Study between Models that Estimate Student's Skill in Virtual Programming Environments)*. Revista Brasileira de Informática na Educação (Brazilian Journal of Computers in Education), 28, 776–795. http://dx.doi.org/10.5753/rbie.2020.28.0.776

J9 **Bez, J. L.**, Carneiro, A. R., Pavan, P. J., Girelli, V. S., Boito, F. Z., Fagundes, B. A., Osthoff, C., da Silva Dias, P. L., Méhaut, J.-F., Navaux, P. O. (2019). *I/O performance of the Santos Dumont supercomputer*. The International Journal of High Performance Computing Applications, 34(2), 227–245. https://doi.org/10.1177/1094342019868526

J10 Boito, F. Z., Inacio, E. C., **Bez, J. L.**, Navaux, P. O. A., Dantas, M. A. R., Denneulin, Y. (2018). *A Checkpoint of Research on Parallel I/O for High-Performance Computing*. ACM Computing Surveys, 51(2), 1–35. https://doi.org/10.1145/3152891

J11 Pavan, P. J., K. Lorenzoni, R., R. Machado, V., **Bez, J. L.**, Padoin, E. L., Z. Boito, F., Navaux, P. O. A., Méhaut, J. (2018). *Energy efficiency and I/O performance of low-power architectures*. Concurrency and Computation: Practice and Experience, 31(18). https://doi.org/10.1002/cpe.4948

J12 Dagostini, J. I.; **Bez, J. L.**; Tonin, N. A.; Rodegheri, P. R. *Um novo ambiente de discussões para o URI Online Judge*. PERSPECTIVA, v. 41, p. 65-74, 2017.

J13 **Bez, J. L.**, Bernart, E. E., dos Santos, F. F., Schnorr, L. M., Navaux, P. O. A. (2016). *Performance and energy efficiency analysis of HPC physics simulation applications in a cluster of ARM processors*. Concurrency and Computation: Practice and Experience, 29(22), e4014. https://doi.org/10.1002/cpe.4014

J14 Tonin, N. A.; **Bez, J. L.** *URI Online Judge: A New Interactive Learning Approach*. Computer Technology and Application, v. 4, p. 34-38, 201.

Conferences

C1 Künas, C., Freytag, G., *Bez, J. L.*, Araújo, T., Navaux, P. *Characterizing Lossless GPU Data Compression Across AMD CDNA and RDNA Architectures*, International Conference on Computational Science and Its Applications (ICCSA), 2026, *Accepted*.

C2 Egersdoerfer, C., Sareen, A., **Bez, J. L.**, Byna, S., Xu, D. D., and Dai, D., *IOAgent: Democratizing Trustworthy HPC I/O Performance Diagnosis Capability via LLMs*, 2025 IEEE International Parallel and Distributed Processing Symposium (IPDPS), Milano, Italy, 2025, pp. 322-334, doi: 10.1109/IPDPS64566.2025.00036.

C3 Djebarov, D., Liem, R., Neuwirth, S., **Bez, J. L.**, and Byna, S., *Streamlining HDF5's AI Workloads Benchmarking*, 2025 IEEE International Parallel and Distributed Processing Symposium Workshops (IPDPSW), Milano, Italy, 2025, pp. 722-730, doi: 10.1109/IPDPSW66978.2025.00113.

C4 Wang, C., Tang, H., **Bez, J. L.**, Byna, S., *Object-Centric Data Management in HPC Workflows - A Case Study*, 2024 IEEE International Conference on Cluster Computing Workshops (CLUSTER Workshops), Kobe, Japan, 2024, pp. 104-108, doi: 10.1109/CLUSTERWorkshops61563.2024.00024.

C5 Hiniduma, K., Byna, S., **Bez, J. L.**, Madduri, R., *AI Data Readiness Inspector (AIDRIN) for Quantitative Assessment of Data Readiness for AI*, 36th International Conference on Scientific and Statistical Database Management (SSDBM'24). Association for Computing Machinery, New York, NY, USA, Article 7, 1–12. https://doi.org/10.1145/3676288.3676296

C6 Egersdoerfer, C., Sareen, Arnav., **Bez, J. L.**, Byna, S., Dai, D., *ION: Navigating HPC I/O Optimization Journey using Large Language Models*, 16th ACM Workshop on Hot Topics in Storage and File Systems (HotStorage'24), 2024, doi: 10.1145/3655038.3665950

C7 **Bez, J.L.**, Ather, H., Xia, Y., Byna, S. (2024). *Drilling Down I/O Bottlenecks with Cross-layer I/O Profile Exploration*, 2024 IEEE International Parallel and Distributed Processing Symposium (IPDPS), San Francisco, CA, USA, 2024, pp. 532-543, doi: 10.1109/IPDPS57955.2024.00053

C8 Rajesh, N., Bateman, K., Byna, B., **Bez, J. L.**, Kougkas, A. (2024). *TunIO: An AI-powered Framework for Optimizing HPC I/O*, 2024 IEEE International Parallel and Distributed Processing Symposium (IPDPS), San Francisco, CA, USA, 2024, pp. 494-505, doi: 10.1109/IPDPS57955.2024.00050

C9 Ather, H., **Bez, J.L.**, Norris, B., Byna, S. (2023). *Illuminating the I/O Optimization Path of Scientific Applications*. In: Bhatele, A., Hammond, J., Baboulin, M., Kruse, C. (eds) High Performance Computing. ISC High Performance 2023. Lecture Notes in Computer Science, vol 13948. Springer, Cham., doi: 10.1007/978-3-031-32041-5_2

C10 B. Dong, **J. L. Bez**, S. Byna. *AIIO: Using Artificial Intelligence for Job-level and Automatic I/O Performance Bottleneck Diagnosis*. The 32nd International Symposium on High-Performance Parallel and Distributed Computing (HPDC), 2023), doi: 10.1145/3588195.3592986

C11 Luettgau, J., Snyder, S., Reddy, T., Awtrey, N., Harms, K., **Bez, J.**, Wang, R., Latham, R., Carns, P., 2023, *Enabling Agile Analysis of I/O Performance Data with PyDarshan*. In Proceedings of the SC '23 Workshops of The International Conference on High Performance Computing, Network, Storage, and Analysis (pp. 1380–1391), https://doi.org/10.1145/3624062.3624207

C12 **J. L. Bez**, A. M. Karimi, A. K. Paul, B. Xie, S. Byna, P. Carns, S. Oral, F. Wang, J. Hanley, *Access Patterns and Performance Behaviors of Multi-layer Supercomputer I/O Subsystems under Production Load*, 31st International ACM Symposium on High-Performance Parallel and Distributed Computing (HPDC '22), 2022, pp. 43-55, doi: 10.1145/3502181.3531461

C13 T. Li, S. Byna, Q. Koziol, H. Tang, **J. L. Bez**, Q. Kang, *h5bench: HDF5 I/O Kernel Suite for Exercising HPC I/O Patterns*.

C14 A. R. Carneiro, **J. L. Bez**, C. Osthoff, L. M. Schnorr and P. O. A. Navaux, *HPC Data Storage at a Glance: The Santos Dumont Experience*, 2021 IEEE 33rd International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD), 2021, pp. 157-166, doi: 10.1109/SBAC-PAD53543.2021.00027

C15 **J. L. Bez**, A. Miranda, R. Nou, F. Z. Boito, T. Cortes and P. Navaux, *Arbitration Policies for On-Demand User-Level I/O Forwarding on HPC Platforms*, 2021 IEEE International Parallel and Distributed Processing Symposium (IPDPS), 2021, pp. 577-586, doi: 10.1109/IPDPS49936.2021.00066.

C16 **Bez, J. L.**, Boito, F. Z., Nou, R., Miranda, A., Cortes, T., Navaux, P. O. A. (2019, October). *Detecting I/O Access Patterns of HPC Workloads at Runtime*. 2019 31st International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD). https://doi.org/10.1109/sbac-pad.2019.00025

C17 Boito, F. Z., Nou, R., Pilla, L. L., **Bez, J. L.**, Mehaut, J.-F., Cortes, T., Navaux, P. O. A. (2019, July). *On server-side file access pattern matching*. 2019 International Conference on High Performance Computing & Simulation (HPCS). https://doi.org/10.1109/hpcs48598.2019.9188092

C18 Pavan, P. J., **Bez, J. L.**, Serpa, M. S., Boito, F. Z., Navaux, P. O. A. (2019, October). *An Unsupervised Learning Approach for I/O Behavior Characterization*. 2019 31st International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD). https://doi.org/10.1109/sbac-pad.2019.00019

C19 Ramos Carneiro, A., **Bez, J. L.**, Zanon Boito, F., Alves Fagundes, B., Osthoff, C., Navaux, P. O. A. (2018, March). *Collective I/O Performance on the Santos Dumont Supercomputer*. 2018 26th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP). https://doi.org/10.1109/pdp2018.2018.00015

C20 Dagostini, J.; LIMA, M. V. de M.; **Bez, J. L.**; Tonin, N. A. *URI Online Judge Blocks: Construindo Soluções em uma Plataforma Online de Programação*. In: XXIX Simpósio Brasileiro de Informática na Educação (Brazilian Symposium on Computers in Education), 2018, Fortaleza. http://dx.doi.org/10.5753/cbie.sbie.2018.168

C21 Prisco, A., Penna, R., Evandro, Botelho, S., Tonin, N., **Bez, J.** (2018, October). *A multidimensional ELO model for matching learning objects*. 2018 IEEE Frontiers in Education Conference (FIE). https://doi.org/10.1109/fie.2018.8658847

C22 **Bez, J. L.**, Boito, F. Z., Schnorr, L. M., Navaux, P. O. A., Mehaut, J.-F. (2017). *TWINS: Server Access Coordination in the I/O Forwarding Layer*. 2017 25th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP). https://doi.org/10.1109/pdp.2017.61

C23 Boito, F. Z., Bez, J. L., Dupros, F., Dantas, M. A. R., Navaux, P. O. A., Aochi, H. (2017). *High Performance I/O for Seismic Wave Propagation Simulations*. 2017 25th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP). https://doi.org/10.1109/pdp.2017.92

C24 Prisco, A.; Santos, R.; Botelho, S. S. da C.; Tonin, N.; **BEZ, J. L.** *Um Sistema de Recomendação Baseado em um Modelo Cognitivo de Aprendizagem*. In: XXVIII Simpósio Brasileiro de Informática na Educação SBIE (Brazilian Symposium on Computers in Education), 2017, Recife, 2017. v. 1. p. 1667-1676. http://dx.doi.org/10.5753/cbie.sbie.2017.1667

C25 Prisco, A., dos Santos, R., Botelho, S., Tonin, N., **Bez, J.** (2017, October). *Using information technology for personalizing the computer science teaching*. 2017 IEEE Frontiers in Education Conference (FIE). https://doi.org/10.1109/fie.2017.8190727

C26 Dagostini, J.; Lima, M. V. de M.; Bucior, L.; Tonin, N. A.; **Bez, J. L.** *Incentivando a Aprendizagem de Algoritmos Através do URI Online Judge Forum 2.0*. In: XXVIII Simpósio Brasileiro de Informática na Educação SBIE (Brazilian Symposium on Computers in Education), 2017, Recife, 2017. v. 1. p. 1781. http://dx.doi.org/10.5753/cbie.sbie.2017.1781

C27 Pavan, P. J.; Lorenzoni, R. K.; **Bez, J. L.**; Boito, F. Z.; Padoin, E. L.; Navaux, P. O. A.; Mehaut, J. *Eficiência Energética e Desempenho de E/S com Arquiteturas de Baixa Potência*. In: Simpósio em Sistemas Computacionais de Alto Desempenho, 2016, Aracaju. Anais da 17a Edição do Simpósio em Sistemas Computacionais de Alto Desempenho, 2016. v. 1.

C28 dos Anjos, J. C. S., Assuncao, M. D., **Bez, J.**, Geyer, C., de Freitas, E. P., Carissimi, A., Costa, J. P. C. L., Fedak, G., Freitag, F., Markl, V., Fergus, P., Pereira, R. (2015, October). *SMART: An Application Framework for Real Time Big Data Analysis on Heterogeneous Cloud Environments*. 2015 IEEE International Conference on Computer and Information Technology; Ubiquitous Computing and Communications; Dependable, Autonomic and Secure Computing; Pervasive Intelligence and Computing (CIT/IUCC/DASC/PICOM). https://doi.org/10.1109/cit/iucc/dasc/picom.2015.29

C29 **Bez, J. L.**; Bernart, E. E.; Santos, F. F.; Schnorr, L. M.; Navaux, P. O. A. *Análise da Eficiência Energética de uma Aplicação HPC de Geofísica em um Cluster de Baixo Consumo*. In: WSCAD 2015 - XVI Simpósio em Sistemas Computacionais de Alto Desempenho, v. 1. p. 228-239, Florianópolis, 2015.

C30 **Bez, J. L.**; Ferreira, C. E.; Tonin, N. A.; *URI Online Judge Academic: A Tool for Professors*. In: 2013 International Conference on Advanced ICT, 2013. http://dx.doi.org/10.1109/ICCSE.2014.6926445

C31 Tonin, N. A.; Zanin, F. A.; **Bez, J. L.** *Enhancing traditional Algorithms classes using URI Online Judge*. In: 2012 International Conference on eLearning and eTechnologies in Education (ICEEE), 2012, Lodz. v. 1. p. 115-118. http://dx.doi.org/10.1109/ICeLeTE.2012.6333402

C32 Tonin, N. A.; Castanho, C. L. O.; **Bez, J. L.** *Using the portal URI Online Judge as a Programming Learning Platform for Computer Science Students*. In: London Internatinal Conference on Education (LICE-2012), v. 1. p. 357-360, 2012.

C33 Tonin, N. A.; **Bez, J. L.** *URI Online Judge: A New Classroom Tool For Interactive Learning*. In: WORLDCOMP'12 - The 2012 World Congress in Computer Science, Computer Engineering, and Applied Computing, 2012, Las Vegas. FECS 2012. USA: CSREA Press, 2012. v. 1. p. 242-246.

Workshops

W1 Md K. H. Chowdhury, H. Tang, **J. L. Bez**, P. Bangalore, and S. Byna, *Efficient Asynchronous I/O with Request Merging*, 4th Workshop on Extreme-Scale Storage and Analysis (ESSA), 2023.

W2 **J. L. Bez**, H. Ather, S. Byna, *Drishti: Guiding End-Users in the I/O Optimization Journey*, 2022 IEEE/ACM Sixth International Parallel Data Systems Workshop (PDSW), 2022, doi: 10.1109/PDSW56643.2022.00006

W3 **J. L. Bez**, H. Tang, B. Xie, D. Williams-Young, R. Latham, R. Ross, S. Oral, S. Byna, *I/O Bottleneck Detection and Tuning: Connecting the Dots using Interactive Log Analysis*, 2021 IEEE/ACM Sixth International Parallel Data Systems Workshop (PDSW), 2021, pp. 15-22, doi: 10.1109/PDSW54622.2021.00008

W4 **Bez, J. L.**, Zanon Boito, F., Nou, R., Miranda, A., Cortes, T., Navaux, P. O. A. *Towards On-Demand I/O Forwarding in HPC Platforms*. International Parallel Data Systems Workshop (PDSW) at The International Conference for High Performance Computing, Networking, Storage, and Analysis (SC20), 2020.

W5 **Bez, J. L.**, Schnorr, L. M., Navaux, P. O. A. *Characterizing Anomalies of a Multicore ARMv7 Cluster with Parallel N-Body Simulations.* 2015 International Symposium on Computer Architecture and High Performance Computing Workshop (SBAC-PADW). https://doi.org/10.1109/sbac-padw.2015.18

W6 **Bez, J. L.**; Boito, F. Z.; Schnorr, L. M.; Navaux, P. O. A. . *Coordinating Data Access at I/O Forwarding Nodes*. In: Workshop de Processamento Paralelo e Distribuído. Porto Alegre, 2016. v. 1. p. 9-11.

W7 Machado, V. R.; Boito, F. Z.; Kassick, R. V.; **Bez, J. L.**; Navaux, P. O. A.; Denneulin, Y. . *Parallel Storage Devices Profiling with SeRRa*. In: 14º WPerformance - XIV Workshop em Desempenho de Sistemas Computacionais e de Comunicação, 2015, Recife.

W8 Selivon, M.; **Bez, J. L.**; Tonin, N. A. . *URI Online Judge Academic: Integração e Consolidação da Ferramenta no Processo de Ensino/Aprendizagem*. In: 23º WEI - Workshop sobre Educação em Computação, 2015, Recife. Anais / XXXV Congresso da Sociedade Brasileira de Computação, 2015.

Short Papers

S1 Lima, M. V. M.; Rodegheri, P. R.; Tonin, N. A.; **Bez, J. L.** *Uma Ferramenta Online para Execução de Scripts em SQL*. In: Escola Regional de Banco de Dados, 2017, Passo Fundo. Anais da XIII Escola Regional de Banco de Dados, 2017. Passo Fundo: Ed. Universidade de Passo Fundo, 2017. v. 1. p. 127-130.

S2 Rampon, N. G.; Boito, F. Z.; **Bez, J. L.**; Navaux, P. O. A. *Otimização de E/S Paralela em Simulações de Ondas Sísmicas*. In: Escola Regional de Alto Desempenho (ERAD/RS), 2017, Ijuí. Anais da XVI Escola Regional de Alto Desempenho (ERAD/RS), 2017. v. 1. p. 343-346.

S3 Machado, V. R.; Braga, A. B.; Rampon, N. G.; Boito, F. Z.; **Bez, J. L.**; Padoin, E. L.; Navaux, P. O. A. *Avaliação do Consumo Energético de processadores ARM em Sistemas de Arquivos Paralelos*. In: Escola Regional de Alto Desempenho (ERAD/RS), 2017, Ijuí. Anais da XVII Escola Regional de Alto Desempenho (ERAD/RS). Ijuí: Impressos Portão, 2017. v. 1. p. 263-266.

S4 Braga, A. B.; Machado V. R.; **Bez, J. L.**; Boito, F. Z.; Navaux, P. O. A. *Influência do Padrão de Acesso na Eficiência Energética de Dispositivos SSDs*. In: Escola Regional de Alto Desempenho (ERAD/RS), 2017, Ijuí. Anais da XVII Escola Regional de Alto Desempenho (ERAD/RS). Ijuí: Impressos Portão, 2017. v. 1. p. 331-334.

S5 **Bez, J. L.**; Boito, F. Z.; Schnorr, L. M.; Navaux, P. O. A. *Escalonamento de I/O em Servidores de Encaminhamento*. In: Escola Regional de Alto Desempenho (ERAD/RS), 2016, São Leopoldo. Anais da XVI Escola Regional de Alto Desempenho (ERAD/RS). São Leopoldo: Impressos Portão, 2016. v. 1. p. 173-174.

S6 Pavan, P. J.; Lorenzoni, R. K.; **Bez, J. L.**; Boito, F. Z.; Padoin, E. L.; Navaux, P. O. A. . *Análise de Consumo Energético e Desempenho de Operações E/S em Arquiteturas de Baixa Potência*. In: Workshop de Processamento Paralelo e Distribuído. Porto Alegre, 2016. v. 1. p. 5-9.

S7 Braga, A. B.; Rampon, N. G.; Machado, V. R.; **Bez, J. L.**; Boito, F. Z.; Kassick, R. V.; Padoin, E. L.; Navaux, P. O. A. . *Viability of Low-Power Architectures as Parallel File Systems*. In: Workshop de Processamento Paralelo e Distribuído. Porto Alegre, 2016. v. 1. p. 27-30.

S8 **Bez, J. L.**; Boito, F. Z.; Kassick, R. V.; Machado, V. R.; Navaux, P. O. A. . *Faster Storage Devices Profiling with Parallel SeRRa*. In: Workshop de Processamento Paralelo e Distribuído, 2015, Porto Alegre. v. 1. p. 33-36.

Posters

P1 Hiniduma, K., **Bez, J. L.**, Madduri, R., Byna, S., *AIDRIN: A Comprehensive Toolset for Automating Data Preparation for AI*. SC25, 2025.

P2 Yazdani, A., **J. L. Bez**, Paul, A. K., Karimi, A. M., Byna, S., Butt, A., *Characterization of the Concurrent Application I/O Interference in Leadership Scale Systems: A Focus on I/O Optimization*, 38th IEEE International Parallel and Distributed Processing Symposium (IPDPS'24), 2024.

P3 **J. L. Bez**, Ather, H., Byna, S., *Drishti: Connecting Metrics to I/O Performance Improvements*, Monterey Data Conference (MDC' 23), 2023.

P4 **J. L. Bez**, Ather, H., Byna, S., *Drishti: Connecting Metrics to I/O Performance Improvements*, Monterey Data Conference (MDC' 23), 2023.

P5 **J. L. Bez**, A. M. Karimi, A. K. Paul, B. Xie, S. Byna, P. Carns, S. Oral, F. Wang, J. Hanley, *Access Patterns and Performance Behaviors of Multi-layer Supercomputer I/O Subsystems under Production Load*, 31st International ACM Symposium on High-Performance Parallel and Distributed Computing (HPDC '22), 2022.

P6 **Bez, J. L.**, Boito, F. Z., Nou, R., Miranda, A., Cortes, T., Navaux, P. O. A. (2019, October). *Towards the Reconfiguration of the I/O Forwarding Layer*. 35th IEEE International Parallel & Distributed Processing Symposium.

Book Chapters

B1 Serpa, M. S.; **Bez, J. L.**; Cruz, E. H. M.; Diener, M.; Zanata, M. A.; Navaux, P. O. A. . *Intel Modern Code: Programação Vetorial e Paralela em Arquiteturas Intel Xeon e Intel Xeon Phi*. In: Edson Luiz Padoin; Márcia Cristina Cera; Andrea Schwertner Charão. (Org.). Escola Regional de Alto Desempenho. 1ed.Ijui: , 2017, v. 1, p. 63-80.

Media

M1 **Bez, J. L.** (2018). *Computer Scientists in Action: Jean Luca Bez, High Performance Computing*. XRDS: Crossroads, The ACM Magazine for Students, 25(1), 64–65. https://doi.org/10.1145/3265939.

PRESENTATIONS

Panel

P1 **Bez, J. L.**, Klymko, K., de Jong, B. (2025). *CSASP Panel – Career Paths: How did I get here?*. CS Summer Student Program 2025 Career Panel held by LBNL.

P2 Dufek, A., Nonaka, A., Trebotich, D., **Bez, J. L.** (2023). *DOE Researcher Panel: How HPC can advance discovery*. Introduction to High-Performance Computing Energy Justice Bootcamp, held by ALCF, ECP, NERSC, OLCF, and Sustainable Horizons Institute (SHI).

Research Talks

RT1 **Bez, J. L.**, Byna, S., Ather, H., *"'Drishti and HDF5: What is actually happening in my application?'*, HDF5 User Group (HUG) Meeting, 2023.

RT2 **Bez, J. L.**, *"'Where's the bottleneck?'*, Berkeley Lab Research SLAM, 2022.

RT3 **Bez, J. L.**, *Towards Understanding I/O Behavior with Interactive Exploration*, Lawrence Berkeley National Laboratory's Computing Sciences Area 2022 Postdoc Symposium, Berkeley, USA, 2022.

RT4 **Bez, J. L.**, Byna, S. *Visualizing Darshan Extended Traces*. Analyzing Parallel I/O – Birds of a Feather, SC'21: Supercomputing, St. Louis, USA, 2021.

RT5 **Bez, J. L.**, Boito, F. Z., Nou, R., Miranda, A., Cortes, T., Navaux, P. O. A. *A Reinforcement Learning Strategy to Tune Request Scheduling at the I/O Forwarding Layer*. HPC-IODC: HPC I/O in the Data Center Workshop, ISC High Performance (Virtual), 2020.

RT6 **Bez, J. L.**, Boito, F. Z., Nou, R., Miranda, A., Cortes, T., Navaux, P. O. A. *Dynamic Reconfiguration of the I/O Forwarding Layer of HPC Architectures*. JLESC – Joint Laboratory on Extreme Scale Computing, Barcelona, Spain, 2018.

Invited Talks

IT1 **Bez, J. L.**, *Visualizing I/O Bottlenecks with DXT Explorer 2.0*, Analyzing Parallel I/O – Birds of a Feather, SC'22: Supercomputing, Dallas, USA, 2022.

IT2 Chiusole, A. **Bez, J. L.** *I/O Profiling on Perlmutter with Darshan*, NERSC Data Day, Berkeley, USA, 2022.

IT3 **Bez, J. L.**, Byna, S. *Understanding I/O Behavior with Interactive Darshan Log Analysis*. ECP Community Days BoF, Online, USA, 2022.

IT4 **Bez, J. L.**, Byna, S. *Visualizing Darshan Extended Traces*, Analyzing Parallel I/O – Birds of a Feather, SC'21: Supercomputing, St. Louis, USA, 2021.

IT5 **Bez, J. L.**, Byna, S. *Towards Understanding I/O Behavior with Interactive Exploration*, SciData – Division Meeting Talk, Lawrence Berkeley National Laboratory, Berkeley, USA, 2022.

IT6 **Bez, J. L.**, Byna, S. *Dynamic Tuning and Reconfiguration of the I/O Forwarding Layer in HPC Platforms – Ph.D. Summary*, SciData – Division Meeting Talk, Lawrence Berkeley National Laboratory, Berkeley, USA, 2021.

IT7 **Bez, J. L.** *De Arquivos a Big Data: Como Supercomputadores Armazenam Dados*. Semana Acadêmica Integrada dos Cursos de Ciência da Computação da URI, Brazil, 2020.

IT8 **Bez, J. L.**; Tonin, N. A. *URI Online Judge: Plataforma e Desafios*. Sétima Semana Acadêmica Integrada das Ciências Computacionais – VII SAICC, Universidade Federal do Rio Grande (FURG), Rio Grande, Brazil, 2017.

IT9 Tonin, N. A. ; **Bez, J. L.** *URI Online Judge - Programação, Aprendizado e Desafios*. Serviço Nacional de Aprendizagem Comercial (SENAC), Passo Fundo, Brazil, 2012.

IT10 Tonin, N. A. ; **Bez, J. L.** *Portal URI Online Judge e a Maratona de Programação*. I Workshop Desafio Pela Inovação. Universidade de Passo Fundo, Passo Fundo, Brazil, 2012.

IT11 Tonin, N. A. ; **Bez, J. L.** *URI Online Judge, um portal para a Prática de Programação*. XXI Simpósio de Inovação em Tecnologias Computacionais. Universidade Regional Integrada do Alto Uruguai e das Missões, Santo Ângelo, Brazil, 2012 (*Invited Talk)*.

IT12 Tonin, N. A. ; **Bez, J. L.** *URI Online Judge - Programação, Aprendizado e Desafios*. Universidade Regional Integrada do Alto Uruguai e das Missões, Frederico Westphalen, Brazil, 2012.

IT13 Tonin, N. A. ; **Bez, J. L.** *URI Online Judge, um Portal para a Prática de Programação*. SITIS 2012 - XXI Simpósio de Inovação em Tecnologias Computacionais. Universidade Regional Integrada do Alto Uruguai e das Missões, Santo Ângelo, Brazil, 2012.

Others

P1 **Bez, J. L.**; Navaux, P. O. A. *Evaluating I/O Scheduling Techniques at the Forwarding Layer and Coordinating Data Server Accesses*. 31º Concurso de Teses e Dissertações (CTD) – XXXVIII Congresso da Sociedade Brasileira de Computação. Sociedade Brasileira de Computação. Natal, Rio Grande do Norte, Brazil, 2018.

P2 **Bez, J. L.**; Tonin, N. A. *URI Online Judge: Coding and Beyond*;. ACM International Collegiate Programming Contest (ICPC) Collaborative Learning Institute Symposium (CLIS), Phuket, Thailand, 2016.

P3 **Bez, J. L.**; Boito, F. Z.; Schnorr, L. M.; Navaux, P. O. A. . *Coordinating Data Access at I/O Forwarding Nodes*. Workshop de Processamento Paralelo e Distribuído. Porto Alegre, Brazil, 2016.

P4 **Bez, J. L.**, Schnorr, L. M., Navaux, P. O. A. *Characterizing Anomalies of a Multicore ARMv7 Cluster with Parallel N-Body Simulations.* 2015 International Symposium on Computer Architecture and High Performance Computing Workshop (SBAC-PADW), Florianópolis, Brazil, 2016.

P5 **Bez, J. L.**; Tonin, N. A.; Rodegheri, P. R. *URI Online Judge Academic: A Tool for Algorithms and Programming Classes*. IEEE International Conference on Computer Science & Education. Univ. of British Columbia, Vancouver, Canada, 2014.

P6 **Bez, J. L.**; Tonin, N A. *The URI Online Judge Learning Platform*. ACM International Collegiate Programming Contest (ICPC) Collaborative Learning Institute Symposium (CLIS), Sanit Petersburg, Russia, 2013.

P7 Tonin, N. A. ; **Bez, J. L.** *URI Online Judge: A New Classroom Tool For Interactive Learning*. WORLDCOMP'12 - The 2012 World Congress in Computer Science, Computer Engineering, and Applied Computing, Las Vegas, USA, 2012.

GRANTS AND FELLOWSHIPS

Grants

G1 **Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)**. Programa Institucional de Internacionalização (PRINT). "Sandwich" Doctorate / Doctoral Stay. Grant 88887.363381/2019-00 (€ 9,640.00).

Scholarships

S1 **Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)**. *Ph.D. Scholarship* (2017 – 2021).

S2 **Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)**. *Masters Scholarship* (2015).

AWARDS

Computing's Top 30 Early Career Professionals for 2025 – *January 2026*
IEEE Computer Society

SBAC-PAD 2025 Paper Recognition Award – *October 2025*
"Data Management in the Continuum: Cross-facility Object-based Data Transfers"
37th IEEE/SBC International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD)

LBNL IPO Office – Inventor of the Year Award – *November 2023*
Lawrence Berkeley National Laboratory

Better Scientific Software (BSSw) Fellow
Honorable Mention — *January 2023*
Better Scientific Software – bssw.io

Berkeley Lab Research SLAM Finalist
Finalist (Computer Sciences) — *September 2022*
"'Where's the bottleneck?'
Lawrence Berkeley National Laboratory

Contest of Thesis and Dissertations in Computer Architecture and High-Performance Computing
First Place (Thesis) — *October 2021*
"Dynamic Tuning and Reconfiguration of the I/O Forwarding Layer in HPC Platforms"
Simpósio de Sistemas Computacionais de Alto Desempenho, promoted by the Brazilian Computer Society

Contest of Thesis and Dissertations in Computer Architecture and High-Performance Computing
First Place (Dissertations) — *October 2017*
"Evaluating I/O Scheduling Techniques at the Forwarding Layer and Coordinating Data Server Accesses"
Simpósio de Sistemas Computacionais de Alto Desempenho, promoted by the Brazilian Computer Society

Brazilian Computer Society (SBC) Highlight Student Award (*Summa Cum Laude* – 9.517 / 10.0)
Awarded by Brazilian Computer Society (SBC) – *February 2015*

URI Erechim Best Student Award (*Summa Cum Laude* – 9.517 / 10.0)
Awarded by Universidade Regional Integrada do Alto Uruguai e das Missões (URI) – *February 2015*

URI University Extension Projects — Highlight Student Award*
Awarded by Universidade Regional Integrada do Alto Uruguai e das Missões (URI) – *2013*
URI Online Judge Project (urionlinejudge.edu.br)

URI University Extension Projects — Highlight Student Award*
Awarded by Universidade Regional Integrada do Alto Uruguai e das Missões (URI) – *2012*
URI Online Judge Project (urionlinejudge.edu.br)

* Awarded to undergraduate students for research and extension projects based on results and impact on the community.

TEACHING EXPERIENCE

Teaching Assistant

TA1 *Advanced Computer Architectures* (2016/1)
Federal University of Rio Grande do Sul
Advisor: Prof. Dr. Philippe O. A. Navaux (UFRGS)

TA2 *Compilers* (2015/2)
Federal University of Rio Grande do Sul
Advisor: Prof. Dr. Philippe O. A. Navaux (UFRGS)

Tutorials and Short Term Courses

ST1 **Bez, J. L.**. *Introdução a Programação MPI com Extensões para E/S (MPI-IO)* ("*Introduction to MPI Programming with I/O Extensions (MPI-IO)*"). Escola de Verão Supercomputador SDumont. National Laboratory for Scientific Computing (LNCC), Petrópolis, Brazil, 2019.

ST2 **Bez, J. L.**. *Introdução ao MPI-IO* ("*Introduction to MPI-IO*"). Escola Regional de Alto Desempenho do Estado do Rio Grande do Sul (ERAD/RS 2018), Porto Alegre, Brazil, 2018.

ST3 **Bez, J. L.**; Boito, F. Z. ; Navaux, P. O. A. . *Introdução a Programação MPI com Extensões para E/S (MPI-IO)* ("*Introduction to MPI Programming with I/O Extensions (MPI-IO)*"). Escola Supercomputador SDumont. National Laboratory for Scientific Computing (LNCC), Petrópolis, Brazil, 2018.

ST4 Alves, M. A. Z.; Diener, M.; Cruz, E. H. M.; **Bez, J. L.**; Navaux, P. O. A. *Workshop Parallel Programming and Optimization for Intel Architecture*. UniRitter, Porto Alegre, Brazil, 2016.

ST5 **Bez, J. L.**; Nava, M. L. *Desenvolvimento Web* ("*Web Development*"). Universidade Regional do Alto Uruguai e das Missões, Erechim, 2014.

ST6 **Bez, J. L.**; Nava, M. L. *Desenvolvimento Web* ("*Web Development*"). Universidade Regional do Alto Uruguai e das Missões, Erechim, 2013.

ST7 Tonin, N. A.; **Bez, J. L.** *Informática para Crianças de Ensino Fundamental no Programa AABB Comunidade* ("*Computer Science for Elementary School Children in the AABB Community Program*"). Universidade Regional do Alto Uruguai e das Missões, Erechim, Brazil, 2011.

ADVISING

Intern Mentoring

IM1 Joel Tony, Summer Intern, Google Summer of Code (GSoC 2024) @ Lawrence Berkeley National Laboratory, 2024.

IM2 Ahmad Hossein Yazdani, Summer Intern, Lawrence Berkeley National Laboratory, 2023.

IM3 Hammad Ather, Summer Intern / Intern, Lawrence Berkeley National Laboratory, 2022 – 2023.

IM4 Asses Kaur, Summer Intern, Lawrence Berkeley National Laboratory, 2022.

IM5 Neeraj Rajesh, Summer Intern, Lawrence Berkeley National Laboratory, 2021.

IM6 Kenneth Casimiro, Summer Intern, Lawrence Berkeley National Laboratory, 2021.

Undergraduate Thesis

UT1 Matheus Felipe Fabian. *Aprimoramento das Competições na Plataforma URI Online Judge*. 2021.
Universidade Regional Integrada do Alto Uruguai e das Missões

Advisor: Neilor A. Tonin (URI)
Co-Advisor: **Jean Luca Bez** (UFRGS)

UT2 Jessica Imlau Dagostini. *Avaliação da Aplicabilidade de Containers em um Sistema Distribuído de Julgamento de Códigos*. 2019
Universidade Regional Integrada do Alto Uruguai e das Missões

Advisor: Neilor A. Tonin (URI)
Co-Advisor: **Jean Luca Bez** (UFRGS)

RESEARCH PROJECTS

RP1 **Enhancing AI Data Readiness in Scientific Data: Integration, Automation, and Human-in-the-Loop Approaches**
2025 – Present

PI for this LDRD (Laboratory Directed Research and Development) research project. We propose exploring and designing standardized metrics to evaluate the AI readiness of datasets, recommending and implementing remedies to enhance data readiness. Focusing initially on High Energy Physics (HEP) data and later expanding to other datasets and domains, the project aims to build a multi-domain solution for reading data for AI-enabled scientific exploration and discovery.

RP2 **PDC – Proactive Data Containers** *2021 – Present*

Collaborator on the PDC project that seeks to provide a novel data abstraction for managing science data in an object-oriented manner. PDC covers multiple R&D efforts such as formulation of object-oriented PDCs and their mapping in different levels of the exascale storage hierarchy, efficient strategies for moving data in deep storage hierarchies, techniques for transforming and reorganizing data based on application requirements, and novel analysis paradigms for enabling data transformations and user-defined analysis on data in PDCs.

RP3 **ECP – Exascale Computing Project** (exascaleproject.org) *2021 – 2023*

Key member on the ECP's ExaIO team that develops HDF5 and UnifyFS libraries in the Exascale Computing Project. Collaborator on the ECP ST/App Integration. ECP is an effort of the US Department of Energy (DOE). ECP aims to deliver breakthrough modeling and simulation solutions that analyze more data in less time, providing insights and answers to the most critical US challenges in scientific discovery, energy assurance, economic competitiveness, and national security. This project encompasses applications, system software, hardware technologies and architectures, and workforce development to meet the scientific and national security mission needs of DOE.

RP4 **Towards Exascale I/O** *2018 – 2021*

Collaborator on the Towards Exascale I/O research project that combines the skills of the Parallel and Distributed Processing Group (GPPD) of the Federal University of Rio Grande do Sul with the research teams of the Barcelona Supercomputing Center (BSC), INRIA, and the National Laboratory for Scientific Computing (LNCC). The GPPD has maintained a line of research on HPC storage for more than 15 years, through various postgraduate studies that have resulted in indexed publications, in addition to several doctoral theses and master's dissertations in I/O for HPC. The BSC Storage group has recognized experience in I/O for HPC due to its expertise with the MareNostrum supercomputer. INRIA Grenoble and Bordeaux have recognized experience in projects with high storage capacities and I/O. Finally, this project aims to bring collaborations in parallel I/O for HPC by proposing and evaluating strategies that help reach Exascale.

Financed by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Brazil.

RP5 **High Performance Computing for Energy (HPC4E)** (hpc4e.eu) *2016 – 2016*

Collaborator on the HPC4E project, which aimed to apply new exascale HPC techniques to energy industry simulations, customizing them, and going beyond the state-of-the-art for different energy source simulations. The HPC4E consortium encompassed 13 partners, seven from Europe, and six from Brazil.

COMMUNITY SERVICE

Community Service

CS1 NERSC User Group Executive Committee (NUGEX), NERSC, 2022 – Present

CS2 ACM SIGHPC: Membership Coordinator, 2021 – Present

CS3 ACM SIGHPC Computing Continuum Chapter: Vice-Chair, 2025 – Present

CS4 ACM SIGHPC Computing Continuum Chapter: Secretary, 2023 – 2025

CS5 ACM SIGHPC Computing Continuum Chapter: Founder

CS6 IO500 Committee Member: 2024 – Present

CS7 IO500: Web Designer, 2020 – Present

Editorial Board

EB1 Future Generation Computer Systems (FGCS): Guest Editor for Special Issue on Cloud Continuum, 2025

EB2 Frontiers in High Performance Computing: Review Editor for HPC Applications, 2023 – Present

EB3 Frontiers in High Performance Computing: Review Editor for High Performance Big Data Systems, 2023 – Present

Program Committee

PC1 SC'26: Reproducibility Initiative Chair, 2026

PC2 HPDC'26: HPDC Worshops Co-chair, 2026

PC3 SBAC-PAD'26: Distributed Systems, Networking, and Storage Track Co-chair, 2026

PC4 ICPP'26: Demo Co-chair, 2026

PC5 ICPP'26: Performance Track PC Member, 2026

PC6 ESSA'26: PC Member, 2026

PC7 CHEOPS'26: Challenges and Opportunities of Efficient and Performant Storage Systems, PC member, 2026

PC8 DRAI'25: Data Readiness for AI Workshop Co-Chair, 2025

PC9 WISDOM'25: Workflows, Intelligent Scientific Data and Optimization for Automated Management Co-Chair, 2025

PC10 SC'25 IO500: Birds-of-a-Feather Organizer, 2025

PC11 SC'25: New Volunteers Chair, Inclusivity, 2025

PC12 SC'25: Finance Liaison for Technical Program, Financial Management, 2025

PC13 SSDBM'25: Proceedings Chair, 2025

PC14 SBAC-PAD'25: Publicity Chair, 2025

PC15 CCGrid'25: SCALE Challenge Track Co-chair, 2025

PC16 SC'24: Reproducibility Challenge Co-chair, 2024

PC17 CARLA'24: Latin America High Performance Computing Conference, 2024

PC18 PDSW'24: Reproducibility Co-chair, 2024

PC19 SBAC-PAD'24: Workshop Proceedings Chair, 2024

PC20 SBAC-PAD'24: Workshop Co-chair, 2024

PC21 SSDBM'24: Proceedings Chair, 2024

PC22 CCGrid'24: SCALE Challenge Track Co-chair, 2024

PC23 HPDC'24: Technical Program Committee Member, 2024

PC24 HiPC'23: Student Research Symposium Committee Member, 2023

PC25 SC'23: Reproducibility Challenge Committee Member, 2023

PC26 SC'23: Artifact Description/Article Evaluation (AD/AE) Submissions Committee Member, 2023

PC27 PDSW'23: Technical Program Committee Member, 2023

PC28 CCGrid'23: PC member of Research Papers (Artifact Evaluation) and SCALE Challenge, 2023

PC29 FIE'23: IEEE Frontiers in Education Conference, Reviewer, 2023

PC30 Escola Regional de Alto Desempenho da Região Sul – ERAD/RS – Fórum de Pós Graduação, 2023

PC31 CHEOPS'23: Challenges and Opportunities of Efficient and Performant Storage Systems, PC member, 2023

PC32 SSDBM'23: Scientific and Statistical Database Management Conference, PC member, 2022

PC33 Cluster'23: Programming and System Software Papers Committee Member, 2023

PC34 PDSW'22: Committee Member (Publicity Chair), 2022

PC35 HPCC'22: Technical Program Committee Member, 2022

PC36 SC'22: Students@SC, PC member, 2022

PC37 SC'22: Artifact Description/Article Evaluation (AD/AE) Submissions Committee Member, 2022

PC38 SSDBM'22: Scientific and Statistical Database Management Conference, PC member, 2022

PC39 REX-IO'22: Workshop on Re-envisioning Extreme-Scale I/O for Emerging Hybrid HPC Workloads, PC member, 2022

PC40 CCGrid'22: PC member of Storage and I/O Systems, 2022

PC41 Escola Regional de Alto Desempenho da Região Sul – ERAD/RS – Fórum de Iniciação Científica, 2022

PC42 SC'21: Student Volunteers (Student Volunteer Reviewers, Virtual Logistics Liaison), 2021

PC43 SC'21: Virtual Logistics Operations Subcommittee (Virtual Logistics Student Volunteer Liaison), 2021

PC44 SC'21: Artifact Description/Article Evaluation (AD/AE) Submissions Committee Member, 2021

PC45 REX-IO'21: Workshop on Re-envisioning Extreme-Scale I/O for Emerging Hybrid HPC Workloads, PC member, 2021

PC46 Escola Regional de Alto Desempenho da Região Sul – ERAD/RS – Fórum de Iniciação Científica, 2021

PC47 WSPPD'20: XV Workshop de Processamento Paralelo e Distribuído/UFRGS, PC member, 2020

PC48 Escola Regional de Alto Desempenho da Região Sul – ERAD/RS – Fórum de Iniciação Científica, 2020

PC49 WSPPD'19: XV Workshop de Processamento Paralelo e Distribuído/UFRGS, PC member, 2019

PC50 WSPPD'18: XV Workshop de Processamento Paralelo e Distribuído/UFRGS, PC member, 2018

PC51 WSPPD'17: XV Workshop de Processamento Paralelo e Distribuído/UFRGS, PC member, 2017

PC52 WSPPD'16: XV Workshop de Processamento Paralelo e Distribuído/UFRGS, PC member, 2016

PC53 WSPPD'15: XV Workshop de Processamento Paralelo e Distribuído/UFRGS, PC member, 2015

External Reviewer

ER1 SC'23: International Conference for High Performance Computing, Networking, Storage, and Analysis, 2023

ER2 IEEE Internet Computing, 2023

ER3 Cluster'22: Programming and System Software Track, 2022

ER4 ICPP'22: 51st International Conference on Parallel Processing, 2022

ER5 Cluster'21: Data, Storage and Visualization / Programming and System Software Track, 2022

ER6 CCGrid'21: 21st IEEE/ACM international Symposium on Cluster, Cloud and. Internet Computing, 2021

ER7 Euro-Par'21: 27th International Conference on Parallel and Distributed Computing, 2021

ER8 ICS'20: 34th ACM International Conference on Supercomputing, 2020

ER9 UCC'18: 11th IEEE/ACM International Conference on Utility and Cloud Computing, 2018

Event Organization

EO1 Navaux, P. O. A., Geyer, C., Schnorr, L. M., **BEZ, J. L.**, Serpa, M. S., Souza Junior, P., *XV Workshop de Processamento Paralelo e Distribuído/UFRGS - WSPPD 2017*, Universidade Federal do Rio Grande do Sul, Instituto de Informática, Porto Alegre, 2017.

Outreach Projects

OP1 **URI Online Judge / beecrowd** (urionlinejudge.com.br / beecrowd.com.br) *2012 – Present*

URI Online Judge is an educational project created in Brazil by Neilor Tonin and Jean Luca Bez to help students learn and practice algorithms and programming languages. It has more than 500,000 registered users worldwide and has automatically evaluated over 20 million source-code solutions for programming assignments. The platform has received more than 20 million solutions. It has also received a Brazilian National Award (Prêmio Santander Universidades) for its impact and importance. The project was presented at the ACM International Collegiate Programming Contest (ICPC) World Finals in St. Petersburg, Russia, and in Phuket, Thailand.

VOLUNTEER EXPERIENCE

VE1 **Selected Lead Student Volunteer** at ACM/IEEE SC'20 Supercomputing Conference, Atlanta (USA), 2020.
Guided Interest Groups (GIG) on Storage and I/O for HPC

VE2 **Selected Student Volunteer** at ACM/IEEE SC'19 Supercomputing Conference, Denver (USA), 2019.

VE3 **ICPC Judge** at the International Collegiate Programming Contest (ICPC) South America/Brazil First Phase, 2018.

VE4 **ICPC Deputy/Student Volunteer** at International Collegiate Programming Contest (ICPC), Phuket, Thailand, 2016.

LANGUAGES

L1 Portuguese (Native)

L2 English (Fluent – C1)

L3 French (Basic – A2.1)

L4 Catalan (Basic – A2.1)