

Publications

Books/Book Chapters

- [1] Zhihui Du, Oliver Alvarado Rodriguez, Joseph Patchett, and David A. Bader. "Interactive Graph Analytics at Scale in Arkouda". Chapter of book "Massive Graph Analytics" ISBN 9780367464127. Published July 20, 2022 by Chapman & Hall.
- [2] Zhihui Du, et al. translation into Chinese. Algorithms and Parallel Computing. By Fayez Gebali. Published by JohnWiley & Sons, Inc. 2011. ISBN:978-0-470-90210-3. Chinese version is published by Tsinghua University Publication. 2012. ISBN:978-7-302-29009-4
- [3] Zhihui Du, Zhili Cheng, Xiaoying Wang, and Chuang Lin, "QoS in Grid Computing", Book Chapter In Handbook of Research on Grid Technologies and Utility Computing: Concepts for Managing Large-Scale Applications, Editors: Emmanuel Udoh and Frank Wang, IGI Global; 2009 May 31.
- [4] Man Wang, Zhihui Du, Zhili Cheng, "Adaptive Resource Management in Grid Environment", Book Chapter In Handbook of Research on Grid Technologies and Utility Computing: Concepts for Managing Large-Scale Applications, Editors: Emmanuel Udoh and Frank Wang, IGI Global; 2009 May 31.
- [5] Zhihui Du, et al. translation into Chinese. "Petascale Computing Algorithms and Applications". By David A. Bader. For Chinese version, Tsinghua University Publication, ISBN: 978-7-302-17722-7, 2008.8
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- [9] Zhihui Du (chief editor) , Peng Liu and Yu Chen (associated chief editor), "Practical Programming in XML", Tsinghua University Publication, ISBN:7-900643-85-0.2002.12. in Chinese
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- [1] Du, Zhihui, Sen Zhang, and David A. Bader. "Tunnel: Parallel-inducing sort for large string analytics." *Future Generation Computer Systems* 149 (2023): 650-663.

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- [2] Zhihui Du, Oliver Alvarado Rodriguez, Fuhuan Li, Mohammad Dindoost, David A. Bader. Contour Algorithm for Connectivity. Accepted by IEEE International Conference on High Performance Computing, Data, and Analytics 2023.
- [3] David Bader, Fuhuan Li, Anya Ganeshan, Ahmet Gundogdu, Jason Lew, Oliver Alvarado Rodriguez, Zhihui Du (2023). Triangle Counting Through Cover-Edges (Graph Challenge Student

Innovation Award).

- [4] Oliver Alvarado Rodriguez, Fernando Vera Buschmann, Zihui Du, David Bader (2023). Property Graphs in Arachne. IEEE HPEC 2023.
- [5] Soroush Vahidi, Baruch Schieber, Zihui Du, David Bader (2023). Parallel Longest Common SubSequence Analysis In Chapel. IEEE HPEC 2023.
- [6] Zihui Du, Oliver Alvarado Rodriguez, Fuhuan Li, Mohammad Dindoost, David Bader (2023). Minimum-Mapping based Connected Components Algorithm. The 10th Annual Chapel Implementers and Users Workshop (CHIUIW), June 2nd, 2023.

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- [8] Zihui Du, Sen Zhang, David A. Bader. Parallel Suffix Sorting for Large String Analytics Truss Analytics Algorithms and Integration in Arkouda. Accepted by 14th International Conference Parallel Processing and Applied Mathematics. Gdansk, Poland. September 11-14, 2022.
- [9] Zihui Du, Joseph Patchett, Oliver Alvarado Rodriguez, David A. Bader, Michael Merrill, and William Reus. " Truss Analytics Algorithms and Integration in Arkouda" The 9th Annual Chapel Implementers and Users Workshop (2022).
- [10] Joseph Patchett, Zihui Du, Oliver Alvarado Rodriguez, David A. Bader. Scalable K-Truss Implementation in Arkouda. New Jersey Big Data Alliance (NJBDA) Symposium at NJIT. 9 May 2022.
- [11] Oliver Alvarado Rodriguez, Zihui Du, David Bader. Adapting Arkouda for Enabling Large Scale Graph Algorithms. IPDPS PhD Forum Presentation. May 30, 2022.
- [12] Oliver Alvarado Rodriguez, Naren Khatwani, Joseph Patchett, Zihui Du, David A. Bader. The Arkouda Framework for Large-Scale Data and Graph Analytics. Accepted by KDD 2022 Tutorials.
- [13] Zihui Du, Joseph Patchett, Oliver Alvarado Rodriguez, David A. Bader. "Productive Truss Analytics and Performance Optimization in Arkouda". Accepted by International Conference on High Performance Computing, Data, and Analytics (HiPC) 2022.
- [14] Oliver A Alvarado Rodriguez; Zihui Du; Joseph T Patchett; Fuhuan Li; David Bader. "Arachne: An Arkouda Package for Large-Scale Graph Analytics". Accepted by IEEE High Performance Extreme Computing Conference (HPEC) 2022.

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- [16] Du, Zihui, Oliver Alvarado Rodriguez, Joseph Patchett, and David A. Bader. "Interactive Graph Stream Analytics in Arkouda." *Algorithms* 14, no. 8 (2021): 221.

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