

MEGAN HICKMAN FULP

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991 Cobblestone Lane, Conway SC 29526

Education

Ph.D., Computer Engineering..... **January 2022 - Present**
Clemson University, Clemson, South Carolina Cumulative GPA: 3.99
Master of Science, Computer Engineering..... **August 2019 - December 2021**
Clemson University, Clemson, South Carolina Cumulative GPA: 3.99
Bachelor of Science, Computer Science (Honors)..... **August 2015 - May 2019**
Minor in Applied Mathematics
Coastal Carolina University, Conway, South Carolina Cumulative GPA: 3.95

Experience

Research Assistant | Clemson University..... August 2019 - Present

- Efficiently parallelized various algorithms within the data reduction pipeline
- Investigated capabilities and drawbacks of varying data reduction algorithms
- Implemented several data reduction pipelines involving compression and sampling

Research Assistant | Los Alamos National Laboratory..... Summers 2017 - 2021

- Conducted research in High-Performance Computing data analysis and reduction
- Engaged in weekly team progress meetings to discuss findings
- Participated in research on-site during the summer season and virtually year-round

Awards, Activities and Affiliations

GAANN Fellowship | Clemson University | *US Department of Education*..... 2020 - Present
Federal grant via the Graduate Assistance in Areas of National Need

Outstanding Student Award | Coastal Carolina University | *Computer Science*.... May 2019
Awarded to one student per major for academic achievements and activities

Honors Fellowship | Coastal Carolina University..... 2015 - May 2019
Organized orientation, mentored students, completed research

Lead Website & App Developer | Ekklesia Christian Church..... 2016 - Present
Organized, developed, and maintained web and app needs; ekkchurch.com

Technical Knowledge

Languages	Python R C C++ CUDA PySpark Java OpenCL SQL HTML
Software	MATLAB Jupyter Notebooks Elasticsearch Kibana RStudio

Recent Publications

(4) Hickman Fulp, Megan, et al. "Accelerated Dynamic Data Reduction Using Spatial and Temporal Properties" *The International Journal of High Performance Computing Applications* (2022): In Submission.

(3) Hickman Fulp, Megan, "Dynamic Reduction of Scientific Data Through Spatiotemporal Properties" (2021). *All Theses*. 3656. https://tigerprints.clemson.edu/all_theses/3656

(2) Hickman Fulp, Megan, et al. "Combining Spatial and Temporal Properties for Improvements in Data Reduction." *2020 IEEE International Conference on Big Data (Big Data)*. IEEE, 2020. <https://ieeexplore.ieee.org/document/9378457>

(1) Tian, Jiannan, Sheng Di, Kai Zhao, Cody Rivera, Megan Hickman Fulp, Robert Underwood, Sian Jin et al. "CuSZ: An efficient gpu-based error-bounded lossy compression framework for scientific data." In *Proceedings of the ACM International Conference on Parallel Architectures and Compilation Techniques*, pp. 3-15. 2020.
<https://dl.acm.org/doi/abs/10.1145/3410463.3414624>