

# Zachary Wayne Parchman

1574 Brinkley Branch Road      (615) 668-2543  
Hendersonville, TN 37075

zwparcman@gmail.com

---

## Objective

I seek to obtain full time employment.

## Technical Skills

- Languages: C, C++, Java, Python 2 and 3, x86 Assembly, Rust
- Tools and Libraries: C++ Standard Template Library, MPI, Cuda, OpenMP, Git and SVN

## Education

**Bachelor of Science in Computer Science, December 2013**

**Tennessee Technological University, Cookeville, Tennessee**

Graduated with a GPA of 3.08 on a 4.0 scale

**Courses completed:**

Design of Algorithms	Operating Systems	Artificial Intelligence
Databases	Computer Networking	Parallel Programming

**Master of Science in Computer Science, Currently Pursuing**

**Tennessee Technological University, Cookeville, Tennessee**

Current GPA 3.47 on a 4.0 scale

**Courses completed:**

Internet Security	Internet Protocols
Internet Algorithmics	High Performance Computing

## Experience

**Research Programmer Intern**

May 2016 - May 2017

Oak Ridge National Laboratory / ORISE, Oak Ridge Tennessee I Designed and implemented a new programming model for heterogeneous large scale systems as part of a team.

**Research Programmer Intern**

May 2015 - August 2015

Oak Ridge National Laboratory / ORISE, Oak Ridge Tennessee I planned and executed the conversion of benchmarking programs to use an experimental modification to MPI to allow for fault tolerance.

**Teacher's Assistant**

January 2014 - May 2016

Tennessee Technological University, Cookeville, Tennessee I graded and tutored for computer science classes to assisted a professor in college courses.

## Publications

- Zachary W. Parchman, Ferrol Aderholdt, and Manjunath Gorentla Venkata. Sharp hash: A high-performing distributed hash for extreme-scale systems. In *2017 IEEE International Conference on Cluster Computing, CLUSTER 2017, Honolulu, HI, USA, September 5-8, 2017*, pages 647–648, 2017
- Manjunath Gorentla Venkata, Ferrol Aderholdt, and Zachary W. Parchman. Sharp: Towards programming extreme-scale systems with hierarchical heterogeneous memory. In *46th International Conference on Parallel Processing Workshops, ICPP Workshops 2017, Bristol, United Kingdom, August 14-17, 2017*, pages 145–154, 2017
- Zachary W. Parchman, Geoffroy Vallée, Thomas Naughton, Christian Engelmann, David E. Bernholdt, and Stephen L. Scott. Adding fault tolerance to NPB benchmarks using ULFM. In *Proceedings of the ACM Workshop on Fault-Tolerance for HPC at Extreme Scale, FTXS@HPDC 2016, Kyoto, Japan, May 31, 2016*, pages 27–34, 2016

## References

Dr. Thomas Naughton

Research staff

UT-Battelle / Oak Ridge National Laboratory

(865) 576-4184

naughtont@ornl.gov

Relationship: Mentor for 2015 internship

Dr. Manjunath Venkata

Research staff

UT-Battelle / Oak Ridge National Laboratory

(865) 574-5949

manjugv@ornl.gov

Relationship: Mentor for 2016 internship