

# Wenbin He

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## Education

<b>2012 – Present</b>	<b>Department of Computer Science and Engineering, The Ohio State University, OH</b> Ph.D. GPA: 3.6/4.0 <i>grad. 12/2019</i>
<b>2008 – 2012</b>	<b>School of Software, Beijing Institute of Technology, Beijing, China</b> B.Eng. degree GPA: 3.4/4.0

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## Work Experience

<b>05/2017 – Present</b>	<b>Graduate Research Associate</b>	<b>The Ohio State University, OH</b>
<b>05/2013 – 12/2016</b>	Working on big data analysis and visualization to understand insights hidden in the data. Mainly focusing on uncertain data analysis and visualization using statistical and deep learning models	
<b>01/2017 – 05/2017</b>	<b>Graduate Teaching Associate</b>	<b>The Ohio State University, OH</b>
	Teaching assistant for <i>Real-Time Rendering</i> and <i>Introduction to Data Visualization</i> classes	
<b>05/2016 – 08/2016</b>	<b>Research Aide</b>	<b>Argonne National Laboratory, IL</b>
	Worked on parallel reduction for large-scale data analysis and visualization on Blue Gene/Q supercomputers	
<b>05/2015 – 07/2015</b>	<b>Research Aide</b>	<b>Argonne National Laboratory, IL</b>
	Worked on analysis and visualization of uncertain unsteady flows using statistical models	

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## Featured Publications

- **Wenbin He**, Hanqi Guo, Han-Wei Shen, and Tom Peterka, “eFESTA: Ensemble Feature Exploration with Surface Density Estimates,” *IEEE Transactions on Visualization and Computer Graphics*. (Early Access)
- **Wenbin He**, Hanqi Guo, Tom Peterka, Sheng Di, Franck Cappello, and Han-Wei Shen, “Parallel Partial Reduction for Large-Scale Data Analysis and Visualization”, *In Proceedings of 2018 IEEE Symposium on Large Data Analysis and Visualization*, 2018. (**Honorable Mention**)
- Hanqi Guo, **Wenbin He**, Sangmin Seo, Han-Wei Shen, Emil Mihai Constantinescu, Chunhui Liu, and Tom Peterka, “Extreme-Scale Stochastic Particle Tracing for Uncertain Unsteady Flow Visualization and Analysis,” *IEEE Transactions on Visualization and Computer Graphics*. (Early Access)
- **Wenbin He**, Xiaotong Liu, Han-Wei Shen, Scott M. Collis, and Jonathan J. Helmus, “Range Likelihood Tree: A Compact and Effective Representation for Visual Exploration of Uncertain Data Sets,” *In Proceedings of 2017 IEEE Pacific Visualization Symposium*, pp. 151–160, 2017.
- Hanqi Guo, **Wenbin He**, Tom Peterka, Han-Wei Shen, Scott M. Collis, and Jonathan J. Helmus, “Finite-Time Lyapunov Exponents and Lagrangian Coherent Structures in Uncertain Unsteady Flows,” *IEEE Transactions on Visualization and Computer Graphics*, vol. 22, no. 6, pp. 1672–1682, 2016.

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## Skills

Languages: C, C++, Python, JavaScript, HTML, CSS  
Graphics and Data Visualization: OpenGL, WebGL, GLSL, Three.js, D3.js  
High Performance Computing: CUDA, MPI  
Deep Learning: TensorFlow, PyTorch