

Tushar M. Athawale

Computer Scientist, Computer Science and Mathematics Division,
Oak Ridge National Laboratory, Knoxville, TN

Email: athawaletm@ornl.gov, Website: <https://www.ornl.gov/staff-profile/tushar-m-athawale>

Education

2015 University of Florida, PhD in Computer Engineering
2014 University of Florida, MS in Computer Engineering
2010 University of Pune, India, BS in Computer Engineering

Experience

Computer Scientist, Oak Ridge National Laboratory (ORNL), 2021-Present

Joint Faculty Assistant Professor, Department of Electrical Engineering and Computer Science, University of Tennessee Knoxville, 2023-Present

Postdoctoral Fellow, Scientific Computing & Imaging (SCI) institute, University of Utah, 2016-2021

Application Support Engineer, MathWorks, Inc., 2015–2016

Intern, Nvidia Corporation, India, 2009-2010

Awards and Honors

Dr. Athawale is among 99 researchers selected across the U.S. to receive the highly competitive and prestigious **U.S. DOE Early Career Award** (2025), highlighting the impact of his work and its strong alignment with national scientific priorities. This award will provide him \$2.75 million in funding in 2026-2030 to advance his research in uncertainty visualization. He is honored as **one of the nation's 74 most elite early-career engineers** (2026) selected across the U.S. industry, national laboratories, and academia by the National Academy of Engineering (NAE) to attend the Grainger Foundation Frontiers of Engineering 2026 Symposium. He received the **Emerging Star in Research Award** (2025) and **Special Award** (2024) from the Computational Sciences Directorate and Division at ORNL, respectively, in recognition of his outstanding and impactful research publications, professional service, and mentorship. He has received **Best Paper and Honorable Mention awards** at leading venues, including the *IEEE Visualization (VIS) Conference* (2024–2025).

Profession Membership and Service

Dr. Athawale is an **IEEE Senior Member** and serves on multiple prestigious IEEE positions. He serves as a **Program Chair** for the *IEEE VIS*—the premier and largest international conference in the field of data visualization (2025–2026). He is also an **Associate Editor** for the *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, a leading visualization journal (impact factor: 6.5). In addition, he **chaired** the IEEE Uncertainty Visualization Workshops in 2024 and 2025. He has reviewed more than 100 papers through service on **program committees** for leading visualization conferences, including *IEEE VIS*, *IEEE PacificVis*, *EuroVis*, *IEEE TopolnVis*, and *Eurographics*, and as a **reviewer** for several prominent journals such as *IEEE TVCG*, *Computer Graphics Forum*, *Computers & Graphics*, *IEEE Computer Graphics and Applications*, and *The Visual Computer*.

Publications and Invited Talks

Dr. Athawale is the first author of more than 10 publications in uncertainty visualization, nine of which appear in the prestigious *IEEE TVCG*. He has authored over 50 peer-reviewed journal, conference, and workshop publications. He has been invited as an uncertainty visualization expert at leading venues, including as an author of the 2022 DOE Visualization Workshop report, a panelist at *Supercomputing* (2025), and a speaker at Los Alamos National Laboratory (2018), the Indian Institute of Science (2019), the Dagstuhl Seminar (2022), and the University of Oklahoma (2025).

Other

With a strong focus on developing the next generation of the STEM workforce, he has mentored four undergraduate interns at ORNL (2023-2026) and taught undergraduate and graduate courses at the University of Utah (2017-2019). He is recognized for pioneering contributions to the uncertainty analysis of isosurfaces—a widely used fundamental visualization technique—by integrating artificial intelligence (AI), probability theory, topological analysis, and parallel computing, advancing trusted data analysis across diverse scientific domains.