



## Educating & Connecting the HPC & AI Community



Subscribe to mailing list: <https://hpcsociety.org/> (bottom of page)  
Follow us: [linkedin.com/company/the-society-of-hpc-professionals/](https://linkedin.com/company/the-society-of-hpc-professionals/)

# Mission

## Educating & Connecting HPC & AI Users to Technology

- We are a vendor-neutral, non-profit 501(c)(3) organization comprised of members from industry, government, and academia worldwide
- Our mission is to educate and connect the HPC & AI user community with the latest technologies and best practices to optimize business processes and promote workforce advancement
- We focus on the high-performance systems used for AI, simulation, cloud computing, quantum computing, and visualization
- Our members utilize these technologies in their work in oil & gas, renewable energy, climate modeling, life sciences, manufacturing, financial services, cybersecurity, government, and academia



Subscribe to mailing list: <https://hpcsociety.org/> (bottom of page)

Follow us: [linkedin.com/company/the-society-of-hpc-professionals/](https://www.linkedin.com/company/the-society-of-hpc-professionals/)

# Member Benefits

**HPC Society membership is open to all HPC professionals serving all industries WW**

If you are interested in participating in the Society's efforts to provide a vendor-neutral, user-centric organization that truly serves the needs of the HPC community, please join us!

## **Individuals can join the Society as Professional Members for an annual fee of just \$60.00**

- No cost to attend all HPC Society events
- View streamed events if not able to attend in person
- Receive access to:
  - Presentation materials (when approved by the presenting organization)
  - Streamed event recordings
  - Archived presentations and technical publications



## **Students can join the Society as Student Members *for free***

- No charge to attend annual technology event
- Half price to attend Lunch & Learn events
- Receive access to:
  - Presentation materials (when approved by the presenting organization)
  - Streamed event recordings
  - Archived presentations and technical publications
- A valid .edu email address is required



Note: membership is for full 12 months regardless of when you join (based on join date, not calendar date)

**Coming soon: new job board for members and sponsors**

# Board of Directors

Welcome our newest Board Members



Doug Norton  
President



Kannan Venkataraman  
Vice President



Dave Montana  
Executive Director



Steve Lutz  
Treasurer



Scott Denham  
Secretary



Lara Kisieleska  
Marketing Director



Rachel Bielstein  
Board Member



Melyssa Fratkin  
Board Member



Lou Marchant  
Board Member



Tonya Cosby Carter  
Board Member



Subscribe to mailing list: <https://hpcsociety.org/> (bottom of page)  
Follow us: [linkedin.com/company/the-society-of-hpc-professionals/](https://www.linkedin.com/company/the-society-of-hpc-professionals/)

# We Thank Our Sponsors



**Platinum Sponsor**



**Gold Sponsor**

**ARISTA**



**Silver Sponsors**

InspireSemi™

VIRIDIEN



**In-Kind Sponsors**



**Hewlett Packard Enterprise  
Data Science Institute**  
University of Houston

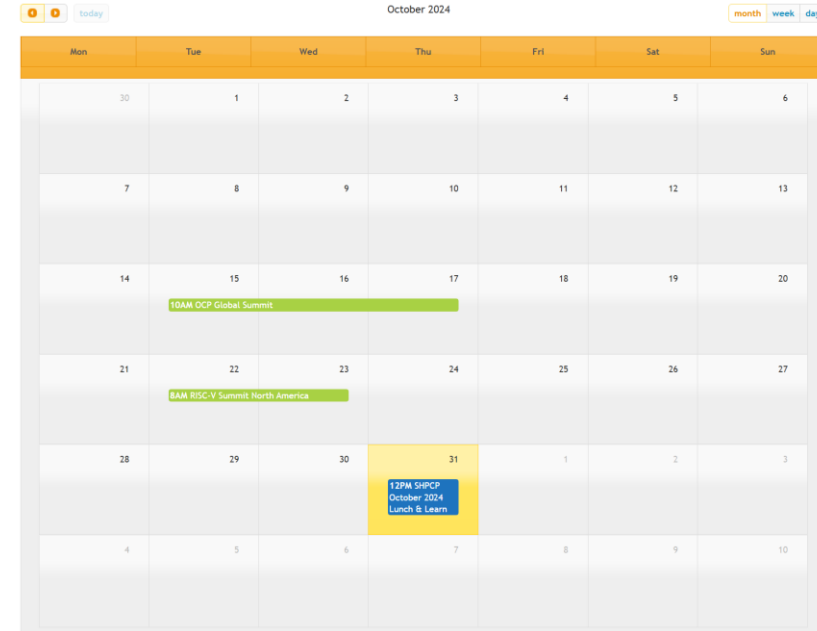


**Media & Analyst Sponsors**

**Sponsorship Opportunities:** <https://hpcsociety.org/get-involved/sponsorship/>

# 2024 Event Schedule

Month	Event	Topic	Houston: HCC West Loop Campus	Austin: Texas Advanced Computing Center	Special Occasion Venue
January 2024	Lunch & Learn	Performant Data Analytics Through Purpose-Built Computer Architecture, Martin Deneroff, CEO Lucata	25 Jan. 2024		
February 2024	Lunch & Learn	Making Digital Twins a Reality for Clinical Oncology - Ernesto Lima, UT Austin		29 Feb. 2024	
March 2024	Partner event	Energy HPC Conference (Rice University)			Rice Univ. BRC 5-7 March 2024
April 2024	Partner event	2024 Gulf Coast Conference & Expo on Artificial Intelligence	11-12 April 2024		
April 2024	Annual SHPCP Event	Annual Technology Meeting of the Society of HPC Professionals 25 April 2024			Shell Woodcreek Campus 25 April 2024
May 2024	Lunch & Learn	Thunderbird Next Gen Compute Accelerator for HPC, AI, and Graph Analytics - Doug Norton, InspireSemi		30 May 2024	
June 2024	Lunch & Learn	No meeting			
Summer 2024	Special event	Tour of Shell and DUG Houston datacenters 2 August 2024			Skybox Datacenters, Houston 2 Aug 2024
August 2024	Lunch & Learn	How HPC Revolutionized Storm Surge Modeling - Clint Dawson, Department Chair Aerospace Engineering & Engineering Mechanics		29 August 2024	
October 2024	Lunch & Learn	AI + Accelerated Computing Enable AI Physics Breakthroughs, Madhu Vellakal, Solutions Engineering Manager, Rescale	31 October 2024		
December 2024	Lunch & Learn	Visualizing HPC		5 December 2024	



Calendar of all upcoming and past events at <https://hpcociety.org/events/>  
Including presentations and video replays for members

# HPC Society Event Participation



## IMAGE '24

The International Meeting for Applied Geoscience & Energy

**26-29 August 2024**

George R. Brown Convention Center  
Houston, Texas



## TACC HPC Leadership Institute, in cooperation with Microsoft and MITRE

The High Performance Computing (HPC) Leadership Institute is specifically tailored to managers and decision makers who are using, or considering using, HPC within their organizations.

**September 16-18, 2024**

Register By September 1, 2024 @ 3:59pm Central

10505 Exploration Way  
Austin, TX 78758



Subscribe to mailing list: <https://hpcsociety.org/> (bottom of page)

Follow us: [linkedin.com/company/the-society-of-hpc-professionals/](https://www.linkedin.com/company/the-society-of-hpc-professionals/)

# Upcoming HPC Society Event Participation



## SC24

The International Conference for High Performance  
Computing, Networking, Storage, and Analysis

**17-22 November 2024**

Georgia World Congress Center  
Atlanta, GA



Subscribe to mailing list: <https://hpcsociety.org/> (bottom of page)  
Follow us: [linkedin.com/company/the-society-of-hpc-professionals/](https://www.linkedin.com/company/the-society-of-hpc-professionals/)



# Today's Topic: AI + Accelerated Computing Enable AI Physics Breakthroughs

Madhu Vellakal, Solutions Engineering Manager, Rescale

**Abstract:** Rescale AI powered by NVIDIA on Rescale revolutionizes computation-driven R&D workflows, offering a turnkey, multi-cloud solution built for enterprises and fully supported to accelerate product development. This talk will cover the high-level introduction of AI Physics on Rescale and its potential, along with real-world implementations in various fields including turbomachinery, LeMans Hypercar aerodynamics, spaceship re-entry, and crash simulations.



Madhu Vellakal is a Solutions Engineering Manager at Rescale. He brings several years of experience in computational science, high-performance computing, analytics, and machine learning to Rescale. He is part of the Forge team at Rescale chartered with accelerating the adoption of AI technologies in CAE workflows.

Madhu has a Master of Engineering in Energy Systems from UIUC and a Master of Science in Mechanical Engineering from the University at Buffalo. He has authored various technical presentations, reviewed abstracts and manuscripts, served on technical committees, and chaired conference sessions.