ME344S: HPC-AI Summer Seminar Series

Presented by Stanford High Performance Computing Center and
HPC-AI Advisory Council
Summer 2023

Instructor: Steve Jones
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Class hours: Wednesday 12:30pm-1:20pm
Location: Shriram 104

Course Description

Get ready to explore the future of high-performance computing (HPC) and artificial intelligence (AI) and its influence on the way we live, work and learn, with the HPC-AI Summer Seminar Series by Stanford High Performance Computing Center and the HPC-AI Advisory Council. This 1-unit course is designed to provide practical insights and thought leadership and discuss topics of great societal importance. One such theme this year is the impact of Generative AI. You will have the opportunity to hear from renowned industry experts and influencers who are shaping our HPC-AI future and even ask them your questions. This engaging course is open to students with any academic background looking to upskill themselves. So don't hesitate, register now! No prerequisites required.

Schedule
The schedule is tentative and subject to change

Week 1, 6/28:
Hardware and Compiler Enhancements for AI
Suvinay Subramanian, Amit Sabne, Karthik Srinivasa Murthy
Software Engineer(s)
Google Brain

Week 2, 7/5:
Anomaly Detection with Deep Generative Model and other physics based generative AI approaches for existing and future architectures
Aaron Lott
Senior Research Scientist
Universities Space Research Administration

Week 3, 7/12:
Industry Analysis of Generative AI
Addison Snell
CEO
Intersect 360

Week 4, 7/19:
Can AI's Be Authors? Revisiting copyright in the age of AI
Iain Cunningham
Vice President and Deputy General Counsel
NVIDIA

Week 5, 7/26
Datacenter Challenges supporting generative AI for the Hyperscalers
Shesha Krishnapura
Intel Fellow, and Intel IT CTO
Intel

Week 6, 8/2:
An Interview with ChatGPT and Eliza on AI and HPC Topics
James Reinders
Engineer
Intel

Week 7, 8/9:
Physics-Inspired AI
Masoud Mohseni
Researcher and Distinguished Technologist
Hewlett Packard Enterprise

Week 8, 8/16:
How to Build Generative AI for Enterprise Use-Cases on NVIDIA DGX
Annamalai Chockalingam and Nirmalya De
Conversational AI & Deep Learning, NVIDIA