PULKIT GOPALANI

Bob and Betty Beyster Building, 2260 Hayward St, Ann Arbor, MI 48109

gopalani@umich.edu | Website | Google Scholar | Github

EDUCATION

University of Michigan, Ann Arbor *Aug '23 – Present*

Doctor of Philosophy (PhD), Computer Science & Engineering

Working on theoretical foundations of deep learning.

Advisor: Prof. Wei Hu

Indian Institute of Technology, Kanpur *Jul '18 – Jul '23*

Bachelor of Technology, *Double Major* (5–year program) Grade: **9.4/10**

Electrical Engineering, Computer Science & Engineering

Honors – Academic Excellence Award (top 10% grade) for 2018, '18–19, '19–20, '21–22; graduated with Distinction.

PUBLICATIONS

[1] **Global Convergence of SGD On Two Layer Neural Nets.** [Paper]
Pulkit Gopalani, Anirbit Mukherjee.

DeepMath 2022 (Extended abstract).

[2] **Capacity Bounds for the DeepONet method of solving Differential Equations.** [Paper]
Pulkit Gopalani, Sayar Karmakar, Anirbit Mukherjee.

DeepMath 2022 (Extended abstract).

[3] **Investigating Overparameterization while solving the Pendulum with DeepONets.** [Paper]
Pulkit Gopalani, Anirbit Mukherjee.

NeurIPS 2021 Workshop on The Symbiosis of Deep Learning and Differential Equations (DLDE).

SKILLS

Programming Languages	Python, C/C++
Frameworks & Libraries	PyTorch, JAX
Utilities	Git, LaTeX

RELEVANT COURSEWORK

Topics in Learning Theory	Topics in Stochastic Processes	Convex Optimization
Information Theory	Introduction to Machine Learning	Intro to Reinforcement Learning
Probability & Statistics	Linear Algebra & ODEs	Multivariate Calculus

VOLUNTEERING

○ **Course Mentor**, *Introduction to Machine Learning* (CS771), Aug–Nov '22, IIT Kanpur.

○ **Reviewer**, *Symbiosis of Deep Learning and Differential Equations* (NeurIPS 2021 Workshop).