PhD Positions in ML/AI (Deep Learning, Computer Vision, LLMs)

The Applied ML & Computer Vision Group, led by Dr. Vinit Katariya, is recruiting motivated PhD students for Spring/Fall 2026. Our research bridges Deep Learning (DL), Computer Vision (CV), and optimization with real-world impact in intelligent transportation, smart cities, cyber-physical systems, and embedded AI.
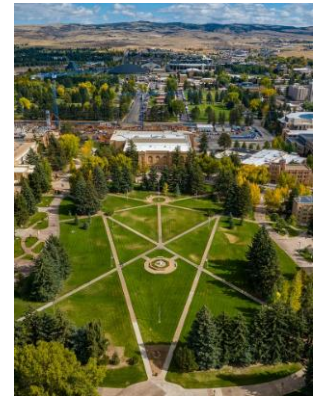
- Computer Vision & Multi-Modal AI – Fusion of video, sensor, and contextual data for robust scene understanding using DL (CNNs, GANs, transformers, foundation models).
- Edge-AI & Embedded Systems – Designing efficient, trustworthy AI pipelines deployable on platforms like NVIDIA Jetson under real-time constraints.
- Intelligent Transportation & Smart Cities – Applying explainable ML to traffic safety, mobility prediction, and infrastructure-aware systems for connected, resilient communities.

Qualifications:
- Currently pursuing or holding an Undergraduate or M.S. in Computer Science/Engineering, Electrical Engineering, Mathematics, or a related field.
- Strong programming and/or mathematical skills. Proficient in deep learning frameworks (e.g., PyTorch, TensorFlow); experience with high-performance computing or embedded computing is a plus.
- Prior research experience in image processing, CV, DL, or ML is highly desirable.
- Strong motivation and passion for conducting research and tackling challenging problems.

About the University of Wyoming
The University of Wyoming (UW) is a Carnegie R1 public land-grant university in Laramie, offering a scenic Rocky Mountain setting with access to Denver, Boulder, and Fort Collins. The campus hosts state-of-the-art facilities, including the Advanced Research Computing Center (ARCC) for high-performance computing, the NCAR–Wyoming Supercomputing Center, the Science Initiative Building, and modern research museums and libraries that support interdisciplinary discovery and innovation.

About the PI:
Dr. Vinit Katariya is an Assistant Professor in Electrical Engineering & Computer Science and the School of Computing at the University of Wyoming. He was previously a Postdoctoral Researcher at UNC Charlotte, working with academic and industry partners on intelligent transportation and smart city CPS applications. He has published in leading AI conferences and journals such as CVPR, ICMLA, and IEEE T-ITS. His research spans computer vision, multi-modal AI, interpretable AI, and edge-AI for resource-constrained platforms to build safer communities through AI. He earned his Ph.D. and M.S. in Electrical Engineering from UNC Charlotte and his B.E. from the University of Pune, India.

How to Apply:
If you're interested in joining the group, email vkatariy@uwyo.edu with the subject "Prospective PhD Student – YOUR NAME" and include: (1) a brief description of your research interests and experience, (2) your current CV, (3) transcripts (if applicable), and (4) Google Scholar/representative publications (if applicable). Promising candidates will be invited for a short interview.