

Ryan Miskovic

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RESEARCH INTERESTS

Machine Learning Systems, Model Compression, Parameter Efficient Fine-Tuning, Edge A.I., HPC & Distributed Systems

EDUCATION

University of Maryland Global Campus, Adelphi, Maryland
Bachelor of Science in Computer Science
Summa Cum Laude

September 2021 — December 2023
Cumulative GPA: 4.00/4.00

Carroll Community College, Westminster, U.S.A
Associate of Science: Law Enforcement

August 2020 — August 2021
Cumulative GPA: 3.80/4.00

RESEARCH EXPERIENCE

**Initialization Techniques for LoRA in 1-3B models:
A Controlled Comparison and Why They Differ**
Graduate researcher

UMBC Catonsville, Maryland
August 2026 — Present

- Investigating parameter-efficient fine-tuning techniques (LoRA) for large language models.
- Implementing benchmarks to test claims of optimization gains in model performance across several research papers.
- Learning research methodology, literature review, and experimental design practices.

PROJECTS

Cluster Computing Environment
Designer/Builder

Maryland, U.S.A.
October 2025 — present

- Designed and built a multi-node cluster using 12 repurposed PCs with distributed computing capabilities for HPC experimentation.
- Technologies used: Proxmox for cluster, Cloudflare for service connectivity, Kasm for streaming workspaces, Nextcloud for cloud storage, custom workspace containers.
- Outcome: learned cluster computing, datacenter workflows, provisioning, resource management, cluster network infrastructure.

Local AI Model Host Node
Designer/Builder

Maryland, U.S.A.
May 2025 — present

- Built a model hosting node using multiple GPUs for experimentation with local LLM api infrastructure and fine tuning.
- Technologies used: 2x nvidia RTX 5060tis, Ollama for model loading/api.
- Outcome: Internally deployed model hosting infrastructure available to connected locally hosted services.

SKILLS

- **Programming:** C/C++, Python, Lisp, Javascript
- **Software:** Proxmox, HyperV, Kubernetes, Rancher Cluster Manager, Docker, Ceph.
- **Soft Skills:** Collaboration, Speaking, Presentation.

REFERENCES

Prof. Douglas Chinn

Associate Professor, Computer Science, UMGC, Adelphi, Maryland

E-mail: douglas.chinn@faculty.umgc.edu

Personal Profiles: <https://science.gsfc.nasa.gov/earth/cryosphere/bio/douglas.s.chinn>