## Elvis Rodrigues

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### Research Internship

Computer Science candidate with proven skill set and experience in network optimization and sustainable networking. Strong computer systems management skill set gained over the course of educational and project career. Analytical problem-solver, able to design strategic plans, prioritize and manage research timelines, and achieve results.

### Core Competencies & Technical Skills:

Data Analytics • Optimization & Automation • Systems Architecture • Technical Documentation • Research & Development • Team Collaboration • Distributed Systems • Networking • Languages: C/C++, Go, Python • PyTorch • ns3

### **EDUCATION & PROFESSIONAL DEVELOPMENT**

**Ph.D., Computer Science** | University at Buffalo, The State University of New York (2027) Bachelor of Science, Computer Science | University of California, Los Angeles (2021)

**Peer Review**, Institute of Electrical Electronics Engineers (IEEE) Int. Conference, CLOUD (2025, 2024), CAI (2025), BigData (2023) Publications & Presentations

**E. Rodrigues**, J. Goldverg and T. Kosar, "Carbon-Aware Temporal Data Transfer Scheduling Across Cloud Datacenters," 2025 IEEE 18th International Conference on Cloud Computing (CLOUD), Helsinki, Finland, 2025

B. Turkkan, **E. Rodrigues**, T. Kosar, A. Charapko, A. Ailijiang and M. Demirbas, "How to Evaluate Distributed Coordination Systems? – A Survey and Analysis," ArXiV, 2024.

H. Jamil, J. Goldverg, **E. Rodrigues**, M. Nine and T. Kosar, "Optimizing Data Transfer Performance and Energy Efficiency with Deep Reinforcement Learning," ArXiV, 2025

J. Goldverg, H. Jamil, **E. Rodrigues** and T. Kosar, "Towards Carbon-Aware Data Transfers," IEEE Internet Computing, 2025 H. Jamil, **E. Rodrigues**, J. Goldverg and T. Kosar, "Learning to Maximize Network Bandwidth Utilization with Deep Reinforcement Learning," GLOBECOM 2023 - 2023 IEEE Global Communications Conference, Kuala Lumpur, Malaysia, 2023.

#### PROFESSIONAL EXPERIENCE

### ${\bf UNIVERSITY\ AT\ BUFFALO-B} uffalo,\ NY$

2021 – Present

### RESEARCH ASSISTANT | 2021 - PRESENT

- Studied designs of and benchmarks for distributed coordination systems. Ongoing work explores carbon emission patterns in wide-area networks.
- Designed optimizers for federated high-volume data transfer services with reinforcement learning (RL); work was presented at 2023's Chameleon User Meeting.
- Studied multi-agent reinforcement learning (RL) algorithms for multi-parameter, multi-objective optimization.

#### LECTURER | PRESENT

- Currently serving as instructor for CSE 586: Distributed Systems for Summer 2025 at the University at Buffalo.
- Designed course with modern distributed systems in mind. Introduced case studies into recent foundational works.

#### TEACHING ASSISTANT | 2021 - 2025

- Selected to assist with Distributed Systems, Operating Systems (OS), and Algorithm Design courses. Created and assigned projects, tasks, and supplementary course materials.
- Managed course planning for large projects, including assignments, course milestones, and weekly requirements.

# NATIONAL CHUNG CHENG UNIVERSITY — Taiwan SUMMER INTERN

August 2020

- Designed and developed video surveillance module to detect vulnerable elderly persons with OpenPose. Software analyzed video feeds and images to determine general stability and fall risk.
- Attended weekly progress meetings, managing timelines and milestones and organizing issue resolution as needed.