

NICHOLAS FOLEY

Schertz, TX — Github.com/Foley-ops — LinkedIn: linkedin.com/in/nicholasmfoley — NickMFoley@gmail.com — (210)-970-8628

PROFESSIONAL OBJECTIVE

Highly motivated Marine Corps veteran and Computer Science student researching in areas of Machine Learning, Deep Learning, Geometric Deep Learning, Physics Models, and Edge AI. Currently in the first semester of in Master's degree in Computer Science at UT San Antonio.

Actively seeking funding opportunities to pursue my research and to enroll in a PhD program. I will be applying to PhD programs in the Fall of 2026.

PUBLICATIONS

Where to Split? A Pareto-Front Analysis of DNN Partitioning for Edge Inference November 2025
To Appear: IEEE EdgeCom 2025 *CloudSys Lab*

- Authors: Adiba Masud, Nicholas Foley, Pragathi Durga Rajarajan, Dr. Palden Lama

EDUCATION

University of Texas at San Antonio Started August 2025
MS Computer Science

Relevant Coursework: Machine Learning

University of Texas at San Antonio Graduated May 2025
BS Computer Science *GPA: 4.0*

- Relevant Coursework: AI, ML, DL, Data Mining, Databases, Embedded Systems, Cloud Computing

Northeast Lakeview College Graduated May 2023
Associate of Science *GPA: 3.94*

- Relevant Coursework: Calculus I & II, Programming I & II

EXPERIENCE

VAIL Lab, UT San Antonio, Dr. Amanda Fernandez June 2025 - Current
Graduate Research Assistant

- Currently researching Geometric Deep Learning Architectures for Computer Vision
- Designing and testing a non-traditional deep learning model using manifold aware neural networks for LLM tasks

Cloudsys Lab, UT San Antonio, Dr. Palden Lama January 2025 - Current
Graduate Research Assistant

- Researching optimized partitioning of DNNs for edge inference
- Currently testing a GNN model for partition predictions on a heterogeneous distributed computing environment

SDS Undergraduate Research Fellowship January 2025 - August 2025
Research Fellow *Cloudsys Lab - UT San Antonio*

- Executed distributed machine learning experiments using NVIDIA Jetson and Raspberry Pi clusters.
- Analyzed model performance and power consumption across edge devices.

USAA

Software/DevOps Engineer Intern

May 2024 - August 2024

San Antonio, TX

- Modified DB-Deploy system for AWS Aurora PostgreSQL, automating grants and permissions while preserving Java architecture.
- Enhanced tool compatibility for cloud environments without introducing new technologies or languages.

Xpedient Technologies

Software/DevOps Engineer Intern

December 2022 - August 2023

San Antonio, TX

- Built a custom CI/CD pipeline for the company’s software development life cycle.
- Used Docker for app containerization, easing deployment and version control processes.

United States Marine Corps - VMGR 352

Aircraft Collateral Duty Quality Assurance Representative

September 2015 - September 2020

San Diego, CA

- Designed and delivered courses on environmental and occupational health and safety for over 100 Marines.
- Performed inspections of aircraft maintenance and parts to ensure compliance with safety and quality standards.
- Oversaw detailed records of explosives and repairable items, increasing tracking accuracy and accountability.

TECHNICAL SKILLS

Programming Languages	Python, C, C++, SQL
Machine Learning	PyTorch, TensorFlow, Scikit-learn
Tools	Docker Compose, Wandb, Git, LaTeX, Jupyter
Operating Systems	Linux, MacOS, Windows

CERTIFICATIONS AND AWARDS

Advanced Learning Algorithms

DeepLearning.AI, Coursera, Stanford CPD, UVM

December 2024

- Skills: TensorFlow, Artificial Neural Networks, Optimization Techniques

Supervised Machine Learning: Regression and Classification

DeepLearning.AI, Coursera, Stanford CPD, UVM

October 2024

- Skills: Linear Regression, Regularization, Model Evaluation

President’s List, UTSA

2023-2025

- Awarded for maintaining a 4.0 GPA.

Eagle Scout - BSA

Service Project

2011

- Awarded for building a bird preserve in an underserved community public school.