mpalko26@unm.edu

DOD SECRET Clearance

SUMMARY OF QUALIFICATIONS

- > Proficiency in Java, C/C++, OOP, SQL, Linux, Git, UML, Python, AFSIM, and AutoCAD
- > Experience writing and applying advanced algorithms to solve real problems
- ➤ Team player: worked collaboratively with professor and other section leaders to develop new CS152 Java course programming project assignment
- Excellent communication skills: have written, filmed and directed two short features including receiving one award at a juried film festival
- > Completed all required CS and math courses

EDUCATION

- ➤ University of New Mexico (Fall 2022 present): GPA 3.9/4.0
 - o BS in Computer Science, Minor in Math, expected graduation Dec 2025
 - o Certificate in Honors Interdisciplinary Liberal Arts

PROFESSIONAL EXPERIENCE

- ➤ Air Force Research Labs Directed Energy Internship (Summer 2024 present)
 - Model High Power Microwave missions using AFSIM and develop code to integrate AFSIM with external modeling and machine learning tools
 - Create UML and written documentation for AFSIM repository and contribute to modular battle management algorithm development
- > Section Leader CS152 Intro to Computer (Java) Programming (Fall 2023 present)
 - Responsibilities include teaching weekly labs, grading and writing new projects/exams, holding weekly office hours, and lesson planning

LEADERSHIP & TEAMS

- ➤ UNM Supercomputing Team (Fall 2024, Spring 2025):
 - Worked on periodic challenges including benchmarking with HPL/HPCG, parallelization techniques, and AWS during Winter Classic Invitational
 - Competed at ACM/IEEE International Conference for High Performance Computing, SC24, focusing on optimizing ICON application for specific hardware
- ➤ Team Manager during CS460 Software Engineering course (Fall 2024):
 - Managed team dynamics and workflow for projects ensuring deadlines are met and reports are clear, concise, and follow required notation
- ➤ UNM Korean Language and Culture Club Executive Board (Fall 2023 Spring 2025):
 - President Led team of officers in planning events, managing club finances, and overseeing activities in collaboration with university organizations
 - Education Chair Develop curriculum and manage teachers for Korean language classes
- ➤ Marine Corp Junior ROTC Executive Officer (2021 2022):
 - Led diverse teams of up to 100 people to complete inventory and organization of assets, produce and present concise reports, plan and host events, and train new recruits