

Alexander R. Kelley

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214 Compton Curry Road

Somerville, AL 35670

EDUCATION

Texas A&M University, College Station, Texas

Bachelor of Science in Computer Engineering

May 2025

GPA: 3.30

Master of Science in Computer Engineering

May 2027

GPA: 3.30

LEADERSHIP

Squadron 6 Flying Tigers, Corps of Cadets, Texas A&M

August 2020 – May 2024

University

Career Readiness Officer, Finance Officer

- Learned and demonstrated key skills such as followership, leadership, teamwork, professionalism, effective communications, and time management while being an active leader in a unit of 50 cadets
- Trained all outfit freshmen in discipline, professionalism, and collaboration
- Enhanced outfit's career readiness by writing, leading, and facilitating training times in such key areas as social media awareness, resume building, interview practice, and even changing tires
- Managed outfit finances, maintaining an up-to-date balance sheet and supervising spending to make best use of the outfit's funds, creating a budget surplus sustaining several events that were unaffordable the previous year

EXPERIENCE

Leidos, Inc., Huntsville, Alabama

June 2022 – Present

Robotics Engineer Intern

- Developed several systems and features to improve the quality of existing nodes' navigation output
- Designed and evaluated potential approaches for challenging open problems in computer vision and navigation
- Devised & implemented performance optimizations for a 50x improvement in an internal node, allowing more ambitious machine learning techniques to be implemented in real-time
- Primary maintainer for a 3D rendering suite used for both data generation and real-time navigation nodes, as well as designer and developer of its second version improving usefulness and clarity

HONORS

O.R. Simpson Honor Society, Texas A&M University Corps of Cadets

August 2021 – May 2024

Tutor

- Demonstrated excellence in academics and willingness to serve others as a contingency for membership
- Tutored cadets in subjects ranging from calculus and physics to statistics and economics several hours per week, honing time management skills and study habits
- Learned to mentor and develop others' knowledge and skills without simply lecturing or giving away answers

SKILLS

- Skilled in prototyping, modeling, and manufacturing to exacting tolerances using a variety of equipment, including mill, lathe, and 3D modeling and printing.
- Experienced in the use of Arduino and other microcontrollers in embedded systems, including communication protocols used for smart home systems. Designed custom circuits and modified existing printed circuit boards to achieve desired functionality.
- Proficient in Python and C++ due to experience in AI, game development, and computer vision R&D at Leidos. This experience extends into a variety of areas, including internet communications, machine learning, UI development, and data structures & algorithms. Basic knowledge of/skill in the use of the Rust programming language.
- Skilled in the use of HTML, CSS, and JavaScript to compose functional, aesthetically pleasing websites.
- Worked in teams to build multiple full-stack web applications using frameworks like React, NextJS, Tailwind CSS, and PostgreSQL.
- Experienced with computer graphics principles, shader design, and APIs, especially OpenGL.