ELAINE SMITH

CONTACT

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(720) 442-4741

TECHNICAL SKILLS

MATLAB/Simulink • Python • Java • C++ • C • Digital Logic • Analog Circuit Design • Cadence Virtuoso • DOORS • Atlassian Tools • Microsoft Office Suite • Basic Mandarin Knowledge

RELEVANT COURSEWORK

Linear Systems and Signals • Electromagnetism • Intro to Communications Principles • Electronics Principles (Diode and Transistor Analysis) • Circuit Theory Applications • Data Structures • Java Programming • Python Programming • Software Development with C++ • Digital Circuit Logic • Microprocessors and the IoT • Telecommunications

PROFILE

Dedicated and engaged Electrical Engineering and Computer Science undergraduate with demonstrated teaching skills and academic distinction. Eager to bring a passion for innovation to companies at the forefront of technology.

SOFT SKILLS

Communication • Teaching • Organization • Problem Solving • Teamwork • Motivation • Adaptability • Versatility

AWARDS

Walter Scott Jr. Undergraduate Scholarship • Dean's list, Fall 2020-Spring 2023 • IEEE-HKN Member • Tau Beta Pi Member

EDUCATION

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING, BACHELOR OF SCIENCE IN COMPUTER SCIENCE

COLORADO STATE UNIVERSITY – DEGREE EXPECTED MAY 2025

- 3.986/4.0 GPA – Dean's List Fall 2020-Spring 2023
- Selected for Colorado State University Drumline (2020, 2021, 2023)

EXPERIENCE

ADAPTIVE OPTICS INTERN, W. M. KECK OBSERVATORY

MAY 2023 – AUGUST 2023

- Designed testing plan, testbed, and lab room for deformable mirror upgrade
- Created method to quantify primary mirror segment coating scratches
- Tested above method, including buying and using astronomy camera, coding MATLAB image processing script, and creating calibration mirror

FLIGHT CONTROLS INTERN, LOCKHEED MARTIN SIKORSKY

JUNE 2022 – MAY 2023

- Created Python scripts to automate auditing processes and perform data analytics on work spanning multiple decades
- Utilized requirement wording in DOORS to search for specific digital logic circuitry in Simulink models to update DOORS requirements

UNDERGRADUATE TEACHING ASSISTANT

PHYSICS II AND JAVA PROGRAMMING

AUGUST 2021 – MAY 2022

- Implemented active learning in a flipped classroom setting, raising average course scores by 5%
- Administered lab sessions and provided one-on-one tutoring
- Guided students to grasping advanced physics and coding concepts

UNDERGRADUATE RESEARCH ASSISTANT, CSU'S CADMIUM TELLURIDE PHOTOVOLTAIC RESEARCH LAB

JANUARY 2021 – MAY 2021

- Assisted with projects like mechanical etching and materials deposition
- Performed diverse equipment maintenance and repair

PROJECTS

RC DRONE UPGRADE

- Designed Arduino circuit to control quadcopter by tilting controller
- Coded and tested all Arduino code for advanced controller
- Assisted in deconstructing old controller, prototyping with new circuitry, and soldering on final modifications

LOCKHEED MARTIN ETHICS COMPETITION 2023

- Researched and compiled information on AI and VR training systems
- Worked with a team to develop a persuasive and innovative solution for a government contracting dilemma