Silas Rodriguez

silrodri@ttu.edu · +1 (432)288-4275 Lubbock, Texas + Midland, Texas

EDUCATION

B.S. Computer Engineering

Texas Tech University, Current GPA: 4.0 Minor Mathematics and Computer Science

Expected Graduation: 2024

PROJECTS & WORKSHOPS

• NASA L'Space Academy

Engineering Team Member-Research and Design. I collaborated on a satellite that deploys seismic probes into the PSR of the moon with documentation and instrumentation research, as well as CAD design.

Siemens NX CAD, Python, Microsoft Office

• FIRST Robotics FTC

Team Captain, Programmer, Alliance Coordinator. Coordinated rover construction, documentation, outreach. Additionally, I designed components and tools as needed using 3-D printing as well as compiled program that converted light frequencies of colors to commands.

Java, Blender, Python, Blocks

• Python Projects

Classifier & machine learning algorithm that compared lyric frequencies in a new song to thousands of other songs to class the new song's genre. students.

Anaconda, Repl, GitHub, numpy, pandas, matplotlib

• Red Raider Startup

Full Stack Development

Develop and process algorithms to handle back end data, website creation, and develop a presentation for mentors and investors. *Python, Django, Microsoft Office*

INVOLVEMENT

- TTU Robotics Alumni and Mentorship Association: Secretary Officer and Volunteer for BEST, GEAR, and FIRST robotics events. Responsible for mentoring and conducting outreach with programming, hardware, and engineering advice. Designed and programmed robots with OnBotJava, RobotC, and Micropython.
- TTU Chem E Car Team: Design hardware & software components to monitor chemical reactions on a robot.
- TTU TIP Program: Meet with TTU faculty and professional electric or computer engineer to study industry professionalism.

Courses Completed

- Data Sciences in Python
 Principles of C and Data Structures
- Modern Digital Systems and Design Electromagnetic Physics, Fundamentals of Electrical Engineering
- Calculus I-III, Differential Equations Mathematical Computing, Engineering Statistics, and Linear Algebra.

SKILLS

Technologies

Python, C, Numpy, Pandas, Tkinter, Atom, VS Code, Anaconda, Blocks, Microsoft + Libre Office, GitHub + Repl, Linux, Windows

• Patterns & Practices

Object Oriented Programming, Functional Programming, Asynchronous Programming, Synchronous Programming, Data Sciences & Analysis

• Soft Skills- From a professor

"Strong communication skills, expert in a collaborative environment, excellent in time management and in critical thinking, and achieves best possible results while working under pressure."

WORK EXPERIENCE

• GEAR Assistant

Student Assistant / Programmer

Build and program a lego mindstorm robot using pybricks library and lego-python + Linux OS, micropython library, assemble team kits, and coordinate competitions

January 2022 - May 2022

GreenTree Country Club

Supervisor, Cook

Assist in coordinating dynamic events serving up to 1700 guests. Supervisor for a team that ran a kitchen operation independent of the primary kitchen, promoted various times over the years, trained new-hires.

June 2018-August 2021

AWARDS & RECOGNITION

• Lockheed Martin STEM Scholar

Awarded for recognition of college performance. 2021

• TTU TIP Scholar

Awarded for academic performance in Computer Engineering 2021

• President's List TTU

Awarded for maintaining a 4.0 GPA 2020-Current

• TTU Presidential Scholar

Awarded for a cademic performance in high school 2020

• TSPE Permian Basin Chapter Scholar

Awarded for engineering involvement in high school. 2019

• TTU BAT LSAMP Scholar

Awarded for future participation in research tutoring. 2022