



ROBERT SCALES

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RELEVANT SKILLS

Coding Languages: Python, C++, C#, C, Java, CSS, HTML, Bash, SQL, Hack Assembly, HDL

Software: Visual Studio, VS Code, Blender, Unity, Vim, Github, Git Pages, Adobe Suites

Languages: English, Spanish

WORK EXPERIENCE

SOFTWARE DEVELOPER (PYTHON, TKINTER, ADOBE INDESIGN)

Metropolitan Acoustics

September 2019 - February 2020

- Developed excel data consolidation software and user interface in python using Tkinter libraries
- Streamlined implementation of Tkinter UI elements by writing a functional python library
- Performed graphic design tasks in Adobe Suites following company's branding

SOFTWARE DEVELOPER (PYTHON, PYVISA, TKINTER)

Drexel University MEM Department
January 2021 - Present

- Developed software to automate parameter sweeps on in-lab source measure unit
- Automated data retrieval from in-lab network analyzer through pyvisa
- Created file-export and transfer structure
- Designed scientific user interface for lab use
- Packaged functionality in executable

PROJECTS

XYLOPHONE PLAYING CAT ANIMATRONIC (ARDUINO)

Hardware and Scripting, 2019

- Worked in scheduled phases of development and prototyping on a 4-person team
- Wrote Arduino code to translate strings of notes into coordinated mechanical motion
- Developed pseudocode and documentation to communicate with non-technical audiences

<https://du2019-grp073-5.blogspot.com/>

48-HOUR STAY SAFE JAM 2020 - SPREAD LOVE (C#, UNITY)

Modelling, Scripting, Animation, Music, 2020

- Independently learned C# scripting using online resources
- Created update patches from user feedback after initial release
- Ported to android with updated UI

<https://rscales.itch.io/spreadlove>

COURSEWORK

- Data Structures
- Interactive Computer Graphics
- Design With Microcontrollers
- Computer Networks
- Discrete Mathematics
- Computer Organization & Architecture

ORGANIZATIONS



Drexel AI

Drexel Artificial Intelligence



DUXR

Drexel University Extended Reality Club (VR/AR)



AES

Audio Engineering Society



ALPFA

Association of Latino Professionals for America



SHPE

Society for Hispanic Professional Engineers



LUC

Latinos for a United Campus