



ROBERT SCALES

610-427-9675 • PHILADELPHIA, PA • RHS58@DREXEL.EDU

RELEVANT SKILLS

GPA 3.19

Coding Languages: Python, C, C#, C++, MATLAB, css, html, Javascript, Java, Processing

Software: Visual Studio, Github, Vim, Git Pages, Tkinter, OpenCV, Microsoft Office Suites, Adobe Suites

Languages: English, Spanish

WORK EXPERIENCE

SOFTWARE DEVELOPER (PYTHON, 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

STUDENT RESEARCHER ON MAGNETIC RESONANCE PIANO (MAX MSP)

ExCite Center

February - August 2020

- Studied Max msp and Puredata documentation
- Independently researched digital audio and waveform manipulation for application in the MRP
- Attended weekly meetings concerning music technology and machine learning methods

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 mechanical motion
- Developed pseudocode 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

- Advanced Programming for Engineers (C)
- Linear Engineering Systems
- Electric Circuits
- Design With Microcontrollers
- Programming for Engineers (Python)
- Discrete Mathematics
- Digital Logic Design
- Neuropsychology

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