## **Bridget Tan**

Engineering student seeking full-time signal processing positions starting in 2021

240-370-4493 bridgett@andrew.cmu.edu bridgettan.me github.com/bridget-tan in

Expected Dec 2020

May 2019

EDUCATION Carnegie Mellon University, Pittsburgh, PA

Master of Science in Electrical and Computer Engineering

GPA: 3.54/4.33

Bachelor of Science in Electrical and Computer Engineering

Minor in Audio Engineering

GPA: 3.31/4.00

SKILLS **Programming:** Advanced - MATLAB, Python, C; Intermediate - C#, LaTeX, HTML, CSS, Assembly (ARM and x86)

Software: Git, Bash, Unity, Solidworks, Audacity, Fritzing, Photoshop, Pro Tools, Microsoft Office, G Suite

Hardware: Arduino, Raspberry Pi

Spoken Languages: English (fluent), Mandarin Chinese (fluent), Spanish (intermediate)

RELEVANT Graduate Coursework:

COURSES

Advanced Digital Signal Processing\*, Machine Learning for Signal Processing\*, Gadgets, Sensors and Activity

Recognition in HCI\*, Computer Vision, Introduction to Machine Learning, Image and Video Processing,

Introduction to Computer Music, Speech Recognition and Understanding \* In progress

Undergraduate Coursework:

Electroacoustics, Fundamentals of Signal Processing, Mechatronic Design, Introduction to Embedded Systems,

Physics of Musical Sound, Speech Processing, Signals and Systems

PROJECTS COVID-19 Innovation Project: Clean Energy Use, Independent Team Project Summer 2020

• Built website with HTML/CSS/JavaScript to visualize data from CSV files and identify clean energy programs

Nyquist Chiptune (8-Bit) Effect, Carnegie Mellon University

Fall 2019

 Created an effect library using the programming language Nyquist, oscillators, and digital filters to convert audio to 8-bit-style sound

Language ID with Universal Phone Recognizer, Carnegie Mellon University

Fall 2019

• Collaborated with two partners to design a Python language identification system with over 85% accuracy for English, German, and Mandarin Chinese speech through comparison of monophones and biphones

RESEARCH Infant Language and Learning Lab, Carnegie Mellon University

**EXPERIENCE** Research Assistant

May 2017 – Sep 2018, Jun 2019 – Jul 2019

- Developed a pipeline to analyze correlation in fNIRS data by utilizing the AnalyzIR Toolbox in MATLAB
- Designed and programmed, in a team of six, video games in Unity promoting cognitive engagement and physical activity to enhance cognitive control and school readiness skills in prekindergarten children

WORK **AB Tech**, Carnegie Mellon University

EXPERIENCE Co-Head of Tech, Student Technician

May 2019 – May 2020, Oct 2015 – Present

- Directed over 30 students and restructured organization to improve workflow and transparency
- Led recruitment and training sessions to teach members technical production skills
- · Managed logistics and coordinated event plans with clients and vendors while staying on budget
- Executed sound, lighting, rigging, and production management for hundreds of successful events every year

**Open Learning Initiative**, Carnegie Mellon University

Assistant Course Developer (Remote)

Jun 2019 - Dec 2019, Mar 2020 - Present

• Ensured quality and developed engaging course workbooks and content for online courses

LEADERSHIP Awareness of Roots in Chinese Culture, Carnegie Mellon University

Executive Board Member September 2015 – Present