Bridget Tan

Engineering student looking for 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 Bachelor of Science in Electrical and Computer Engineering

Minor in Audio Engineering Cumulative GPA: 3.54/4.33

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

Software: Git, Bash, Unity3D, Solidworks, Audacity, Photoshop, Illustrator, Pro Tools, Microsoft Office, G Suite

Hardware: Arduino, Raspberry Pi

Spoken Languages: English, Mandarin Chinese, Spanish

RELEVANT Graduate Coursework:

COURSES Computer Vision, Introduction to Machine Learning, Image and Video Processing, Introduction to Computer Music,

Speech Recognition and Understanding

Undergraduate Coursework:

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

Physics of Musical Sound, Fundamentals of Control, Speech Processing

WORK AB Tech, Carnegie Mellon University

EXPERIENCE Student Technician (Stagehand & Production Manager)

Oct 2015 – Present

Managed logistics and coordinated event plans with clients and vendors while staying on budget

Executed sound, lighting, rigging, and production and stage management for the university's community

Open Learning Initiative, Carnegie Mellon University

Assistant Course Developer

Jun 2019 - Dec 2019, Mar 2020 - Present

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

RESEARCH Infant Language and Learning Lab, Carnegie Mellon University

EXPERIENCE Research Programmer

May 2017 - Sep 2018, Summer 2019

Developed a pipeline to analyze correlation in NIRS data by utilizing the AnalyzIR Toolbox in MATLAB

- Worked on a team of six to design and program video games promoting cognitive engagement and physical activity, which enhanced cognitive control and school readiness skills in prekindergarten children
- Adapted a computer application to assess attention in infants for investigating early markers of ADHD

PROJECTS **Toy Camera**, Carnegie Mellon University

Feb 2020

• Fabricated a toy camera made of laser cut acrylic, 3D printed parts, and electronics with a team of 3

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

Fall 2019

• Created a chiptune effect library using Nyquist, a sound synthesis and composition language

Language ID with Universal Phone Recognizer, Carnegie Mellon University

Fall 2019

• Collaborated with two partners to design a language identification system with over 85% accuracy for English, German, and Mandarin Chinese speech using phones for identification

Window Washing Robot, Carnegie Mellon University

Spring 2019

• Constructed, with a team of five, an autonomous robot that adheres to and cleans a window in 3 minutes

LEADERSHIP AB Tech, Carnegie Mellon University

Co-Head of Tech, Executive Board Member/Officer

May 2019 - May 2020, May 2017 - Present

- Directed over 30 students to provide entertainment production for hundreds of successful events every year
- Led recruitment and training sessions to teach members technical production skills