Bridget Tan

Engineering student looking for full-time signal processing positions starting in 2021

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA
Master of Science in Electrical and Computer Engineering   Expected Dec 2020
GPA: 3.54/4.33
Bachelor of Science in Electrical and Computer Engineering   May 2019
Minor in Audio Engineering

SKILLS

Programming: Advanced - MATLAB, Python, C; Intermediate - C#, LaTeX, HTML, CSS, Assembly (ARM and x86)
Software: Git, Bash, Unity3D, Solidworks, Audacity, Fritzing, Photoshop, Pro Tools, Microsoft Office, G Suite
Hardware: Arduino, Raspberry Pi
Spoken Languages: English (fluent), Mandarin Chinese (fluent), Spanish (intermediate)

RELEVANT COURSES

Graduate Coursework:
  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

WORK EXPERIENCE

AB Tech, Carnegie Mellon University
Student Technician   Oct 2015 – Present
- 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

RESEARCH EXPERIENCE

Infant Language and Learning Lab, Carnegie Mellon University
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 promoting cognitive engagement and physical activity to enhance cognitive control and school readiness skills in prekindergarten children

PROJECTS

Theremin with Environmental Control, Independent Project   Summer 2020
- Prototyped a theremin instrument controlled by distance and temperature using an Arduino with a partner

Nyquist Chiptune (8-Bit) Effect, Carnegie Mellon University   Fall 2019
- Created an effect library using the programming language Nyquist 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 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, Public Relations & Social Chair   May 2019 – May 2020, May 2019 – Present
- Directed over 30 students and restructured organization to improve workflow and transparency
- Led recruitment and training sessions to teach members technical production skills