

Sophia Mehdizadeh

smehdizadeh7@gatech.edu

U.S. Citizen

Atlanta, GA 30318

EDUCATION

Georgia Institute of Technology

Atlanta, GA

M.S. in Music Technology, *Brain Music Lab*

Dec 2021

- Relevant Coursework: Music Perception & Cognition, Audio Software Eng., Statistical Modeling & Regression, Digital Signal Processing, Neur. Circuits, Systems, & Behav.
- GPA: 4.00 / 4.00

University of Michigan

Ann Arbor, MI

B.S.E. in Electrical Engineering, Music Minor

Apr 2018

- GPA: 3.35 / 4.00
- Concentration: analog/digital signal processing, analog circuit design/analysis

PROFESSIONAL EXPERIENCE

Georgia Institute of Technology, School of Music

Atlanta, GA

Graduate Research Assistant, Brain Music Lab

Jan 2020 – Present

- Design a **behavioral and dual EEG/fMRI** human-subjects experiment to study music's ability to influence **episodic memory** via reconsolidation mechanisms
- Explore physiological correlates of **musical preference** through analyses of preference models and **PPG/respiration** biosignals
- Create instructional videos for lab equipment to assist future lab members

Summer Teaching Assistant

May – July 2020

- Tutored and graded for Intro to Music Theory, including one-on-one help with notation and aural skills

Mitsubishi Electric Automotive America

Northville, MI

Audio Engineer, Advanced Development

June 2018 – Jan 2020

- Managed custom interior electrical and mechanical modification of Consumer Electronics Show demo vehicle
- Performed **ITU-T hands-free parameter tuning** for infotainment production projects
- Communicated with customers, 3rd party suppliers, and team members locally and internationally

Audio Video Communications Engineering Intern

May – July 2017

- Increased vehicle interactivity by integrating the **Internet of Things**, virtual assistants, and **cloud computing (AWS)** into projects
- Interfaced JavaScript and Python code on **Raspberry Pi** with vehicle hardware and Controller Area Network Bus (**CAN Bus**)

PROJECT AND LEADERSHIP EXPERIENCE

Michigan Project Music

Ann Arbor, MI

Vice President, Build Team Manager

Apr 2016 – Apr 2018

- Lead a multidisciplinary team through the design and manufacturing process of experimental musical instrument projects

CONFERENCES & PUBLICATIONS

- ICMP, *Novel Methodologies for Secondary Analyses of Physiological and Musical Preference Data*

July 2021

AWARDS

- CABI MRI seed grant recipient (*Using Music to Modulate Emotional Memory*)
- Winner of 2021 Moog Music Hackathon (*Magnebacus*)

Apr 2021

Feb 2021

SKILLS

Computer Applications

- MATLAB, Simulink, C/C++, Python, JUCE, Visual Studio, Minitab, SPSS, R
- Ableton, Logic, Reaper, MaxMSP, ChuckK
- Microsoft Office (Word, Excel, PowerPoint)

Electronic Test/Measurement Equipment

- Digital Multimeter, Oscilloscope, Function Generator

Design, Fabrication & Prototyping

- Basic shop tools, Mill, Lathe, Laser Cutting, 3D Printing, Soldering, Arduino, Raspberry Pi
- PCB design (Eagle, Altium), CAD (SolidWorks, AutoCAD)

Languages

- Fluent in Greek, moderate knowledge of Spanish

Hobbies: Creating music (guitar, vocals), building instruments, board games, animal shelter volunteer