**BRIAN TICE** 

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#### **EDUCATION**

| Ph.D. | UC San Diego  | Computer Music         | La Jolla, CA   | Expected 2026 |
|-------|---------------|------------------------|----------------|---------------|
| M.S.  | MIT           | MIT Media Lab          | Cambridge, MA  | 2017          |
| B.S.  | UC Santa Cruz | Electrical Engineering | Santa Cruz, CA | 2007          |

#### PROFESSIONAL EXPERIENCE

## ELECTROSMITH | Software Engineer | San Clemente, CA

6/2023 - Present

MOBILE: +1 (714) 514-4225

Embedded DSP audio algorithms. Member of a team that is developing a new hardware/software audio products. Part Time.

### UC SAN DIEGO | Graduate Student | La Jolla, CA

9/2022 - Present

Researching new methods to make and experience audio. Graduate coursework in Digital Signal Processing for Audio, Interdisciplinary Technological Approaches to Performance, Machine Learning (Python, Ableton). Coursework in Audio Spatialization using Dolby Atmos.

### HYDROID INC | Firmware Systems Architect | Pocasset, MA

8/2020 - 8/2022

Embedded Systems and Firmware Engineer

7/2018 - 8/2020

Developed firmware for subsea Autonomous Underwater Vehicles. Projects included vehicle safety systems, battery management systems, underwater acoustic systems, core electronic upgrades. Created hardware and software test plans and trained technicians to bring up new circuit boards. Hydroid was acquired by Huntington Ingalls in 2020.

### MIT MEDIA LAB | Research Assistant, Graduate Student | Cambridge, MA

9/2015 - 6/2017

Research and development on reactive musical applications, interactive computer systems, and media installations. Published paper on 3-D tangible interface which won an honorable mention at CHI Conference in 2016. Published a thesis titled Sonic Artifacts that explored a physical object that represents and contains a musical album and allows for real time interaction with the listener.

#### TECHSHOP SF | Instructor | San Francisco, CA

11/2012 - 8/2015

Led classes in circuit design and microcontroller programming in C and C++. Helped students brainstorm and prototype projects. Developed prototypes for private clients; one of which included a prototype for a non-profit conservation effort that led to a 25k grant from National Geographic and matching grant from private donors

### PINNACLE TECHNOLOGIES | Electrical Engineer | San Francisco, CA

3/2008 - 9/2013

Designed and manufactured sensitive electronic tilt meters. Repaired mixed signal circuit boards, motors, and sensors. Worked on PIC based and TI MSP430 based systems. Developed test and pneumatically actuated calibration software for geomagnetic compass subsystem, written in C++ and .NET

#### SOL DIAMOND LLC | Co-founder | San Francisco, CA.

11/2008 - Present

Co-founder of a publishing company for my band Sleepy Sun. Performed in eighteen countries as drummer. Five albums released, with support tours in North America, Australia, and Europe. Numerous live radio appearances. Song placements in five TV shows, several surf and snowboard videos, and a major motion picture

# PLANTRONICS | Electrical Engineering Intern | Santa Cruz, CA.

7/2007 - 12/2007

Developed an audio processing suite that evaluated sophisticated DSP algorithms using windows-based software such as Lab-View, MATLAB, Adobe Audition, and Visual Audio

#### **SKILLS**

C/C++, Python, MATLAB, Assembly, Linux, Javascript, Typescript, Docker, Pure Data, Oscilloscope, Logic Analyzer PCB Circuit Design with Altium and Eagle, shop and prototyping skills.