Brian Ellis

(512) 217-2038
brian.ellis@utexas.edu
www.brianellissound.com

Education
University of Texas at Austin, Class of 2019. **Double Major**: BSA **Computer Science**, BA **Music** - Classical Guitar
- **Honors**: College of Natural Sciences Polymathic Scholars
- **Thesis**: Music and the Computational Brain: Towards the Use of Technology in Divesting Musical Agency
- Cumulative GPA: **3.70**

Work Experience
- **Facebook** – *2019 to Present* – Software Engineer on the Voice Assistant Team, building developer pipelines and publish flows for natural language generation and conversational logic.
- **Facebook** – *Summer 2018* – Internship involved developing a pipeline and GUI for regression detection and metric population adjustment. Participated in company hackathons for music-recommending user-facing features.
- **University of Texas** – *2017 to 2019* – Researcher in the Integrative Biology department streamlining a big-data bacteria speciation pipeline. Position included extensive redesign of existing code base to make it lightweight, web-ready, and able to be run in a distributed environment. (Python, AWS, OpenMPI)
    - **Publication:** DOI: 10.1093/bioinformatics/bty400
- **Audible** – *Summer 2017* – Software Engineering Internship developing a model-based testing framework.
- **Union Pacific** – *Summer 2016* – Software Engineering Intern, collaborated to develop a predictive costing system.

Projects
- **Songitude** (full stack, AWS) – *Summer 2018 to Present* – A web-based location-based sound player meant to enable geographically relevant musical experiences. Used to compose and distribute sonic installations that exist permanently around a geographic location. Live online at www.songitude.com
- **Small Music** (MAX/MSP, python) – *Spring 2018 to Present* – A composition for soloist and live electronics, presented at the International Computer Music Conference and New York City Electroacoustic Music Festival in June of 2019.
- **Sonata Generator** (Java) – *Spring 2017* – Designed and implemented an expert-system algorithm that generates a piano sonata. (think early Mozart) www.brianellissound.com/sonata

Coursework
Practical Applications of NLP, Artificial Intelligence H(Honors), Computer Music, Algorithms and Complexity Theory, Data Management, Computer Science Policy (H), Programming Languages (H), Operating Systems (H), Linear Algebra, Computational Evolution, Computer Architecture (H), Data Structures, Discrete Math (H), Probability and Statistics

Leadership
- **Alpha Phi Omega: Flag Coordinator** – *2019* – Organized and promoted opportunities for APO to present the world's largest Texas flag at sporting and community events. Innovated membership education by producing demonstration videos for all "Flag Tricks" the chapter performs and started capital campaign for replacement flags.
- **Texas Blazers: New Guy Project Co-Coordinator** – *2018* – Orchestrated a "Duck Derby" fundraiser and two volunteering weekends to help members of the Port Aransas rebuild community after Hurricane Harvey.
- **Alpha Phi Omega: Merit Badge University (MBU) Coordinator** – *2016* – Charged with organizing the largest MBU in the country, annually attended by over 1400 scouts from Texas and beyond. Managed a budget of $24,000.

The Other Stuff
- Member of the UT Steel Pan Ensemble – *2015 to 2020*
- Active composer and Classical Guitarist – *2001 to Present*
- Founding Member of Burnt Orange Bluegrass, a student bluegrass music group on UT campus – *2014 to 2017*
- Region 7 Representative to the National Student Advisory Committee of Alpha Phi Omega – *2015 to 2016*