

# Madhav Ghei

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## Education

**Northwestern University, School of Communication** *Evanston, IL*.....**Aug 2019 (Expected)**  
Master of Arts in Sound Arts and Industries

**Northwestern University, Robert R. McCormick School of Engineering and Applied Science**, *Evanston, IL*..... **2018**  
Bachelor of Science in Computer Science, Minor in Music Technology

## Related Experience

**Northwestern University, Teaching Assistant**, *Evanston, IL* ..... **Apr 2019 – Ongoing**

- Class name: RTVF 376 - Digital Musical Instrument Design.
- Provide additional instruction and one-on-one lessons with students (as needed and during office hours).

**Northwestern University, Ableton Live Workshop Leader**, *Evanston, IL* .....**May 2019**

- Formulated a targeted workshop lesson plan by gathering questions from attendees in advance.
- Trained, educated, and mentored attendees on basic composition, mixing, and mastering workflows in Live.

**Interactive Audio Lab (Northwestern University), Undergraduate Research Assistant**, *Evanston, IL* .....**Jan-Sep 2018**

- Developed a UI for an audio search engine in HTML5/CSS/JavaScript (with JQuery), which allows users to search a database of sounds using a vocal imitation of the desired sound as the query.
- Connected the web UI to a Python Flask backend that runs a deep learning search model.
- Co-authored two research papers in DCASE conference proceedings (see Publications).

**Ford Motor Company, Business Continuity & Disaster Recovery (BC/DR) Intern**, *Dearborn, MI* .....**Jun-Sep 2017**

- Planned, coordinated, and drove DR tests.
- Optimized DR test workflow by eliminating redundancies and automating steps of the process.
- Developed an online form to gather feedback and evaluate future Call-Tree Tools and BC tests.
- Created a metric tracker to automatically report results from future DR tests.

## Other Experience

**Music Production** .....**Sep 2014 - Ongoing**

- Create musical compositions, some compositions sample other works (see Website).
- Produce in Ableton Live, mix in Pro Tools, and master in Adobe Audition or ProTools.

## Publications

- Margolis, B., **Ghei, M.**, Pardo, B. (2018) "Applying Triplet Loss to Siamese-Style Networks for Audio Similarity". *DCASE 2018 Proceedings*. <https://bit.ly/2Wneo7U>.
- Kim, B., **Ghei, M.**, Pardo, B., Duan, Z. (2018) "Vocal Imitation Set: a dataset of vocally imitated sound events using the AudioSet ontology". *DCASE 2018 Proceedings*. <https://bit.ly/2RQTWh0>.

## Recent Projects

**The Greenleaf Band**, *Chicago, IL* .....**Sept 2018 - Ongoing**

- Recording, mixing, and mastering for upcoming studio album.

**Sain Levrard**, *Evanston, IL* .....**Sept 2018 - Ongoing**

- Recording vocals and co-producing some songs
- Mixing and mastering all songs

**Arup Sound Lab**, *Chicago, IL* .....**May 2019**

- Composed "Partial Occluder", a sound art piece, using VCV Rack and Ableton Live, then mixed into ambisonics in Reaper using IEM plugin suite.
- Selected to present "Partial Occluder" at the Arup Sound Lab.

## Skills

### Computer-Based:

- Music software: Ableton Live, ProTools, Adobe Audition, Logic Pro X, FL Studio, Reaper, VCV Rack.
- Programming languages: Java, C, C++, C#, Python, Racket, HTML, CSS, JavaScript.

### Instrumental:

- Violin (classically trained), Guitar (some formal training), DJ (self-taught), Ableton Push (self-taught).

**Spoken Languages:** English (native), German (B2 level), Hindi (colloquial/familial), Spanish (AP-level)