

Michael McNulty  
Rising Third-Year Award Outcome  
Faculty Advisor: Michael Rasbury  
**Compositional Tools for Career as a Film Composer**

*Project Outcome*

I'd like to thank the Miller Arts Scholars organization for the incredibly generous grant that allowed me to acquire professional quality compositional tools, giving me all the resources I need to work as a freelance film composer when I graduate. This grant was used to purchase two instrument libraries, a hard drive, and a midi controller. The SWAM instrument library is a library that contains sounds that are digitally programmed to sound like individual players playing by themselves on real instruments. The Spitfire library contains samples of an actual live orchestra. Using both libraries together one can create a digital realization of an orchestral score that can fool a listener into thinking that a real ensemble is playing. This is a very valuable skill for a film composer because it allows them to write for virtually any ensemble without the cost/logistics of having a real ensemble play. Because of how big the Spitfire library is, a separate harddrive is necessary to store the library on. The midi controller allows one to manipulate the sounds in the libraries to suit the purposes of the piece.

In the fall of 2021 I took an independent study with sound design professor at UVA Michael Rasbury to learn how to best use these libraries to make the types of digital realizations I was interested in. In this course Professor Rasbury worked with me on adapting this process to my compositional style of writing music notation in the program Sibelius, versus many composers who write directly through a midi keyboard. The first part of this course involved getting me familiar with the Digital Audio Workstation called Logic Pro that would be the workspace for all of my compositional projects. I also learned the basics of operating my midi keyboard and how to access my libraries.

The first project we worked on was an orchestral project where I wrote a short excerpt of orchestral music that we produced together. In this process I learned the pros and cons of each library, for example how the SWAM library is more malleable and can be used more expressively while the Spitfire library creates better section sounds. This greatly improved my knowledge of producing orchestral works. While I was taking this class in the fall I was also enrolled in the course Orchestration II in the music department where I studied a large volume of orchestral scores, did a number of writing projects, and greatly improved my ability to write for an orchestra. While the focus of the orchestral project in my independent study was more a producing project and therefore doesn't represent my full compositional skills for orchestra, I now feel confident that I can successfully write for orchestra and produce realistic sounding music.

While my proposal for this arts award centered around orchestral writing, Professor Rasbury suggested that we spend the majority of the semester trying to produce big band jazz ensemble music because this is the type of composition that I am most interested in. In this project I used primarily the SWAM audio modeling instruments because that library has the best brass and woodwind instruments for what I was interested in doing. For the rhythm section parts I played the guitar, bass, and piano parts myself and created a drum part using the drums that

come with Logic Pro. After all the parts had been put into Logic Pro, the end of the semester was spent learning the basics of mixing and mastering to make an mp3 of my work that could be shared with others.

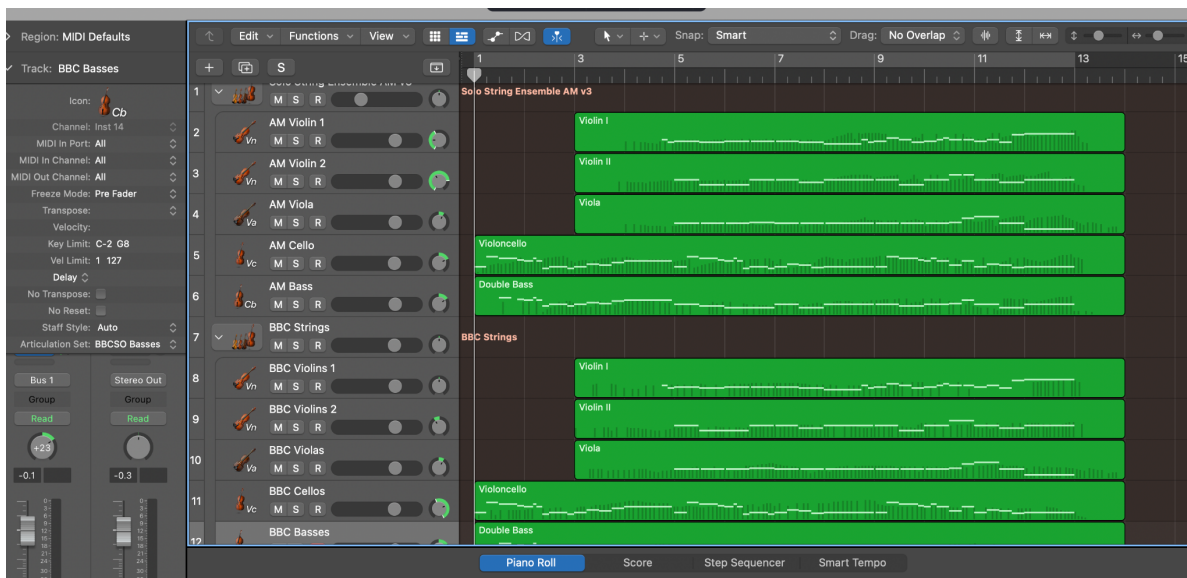
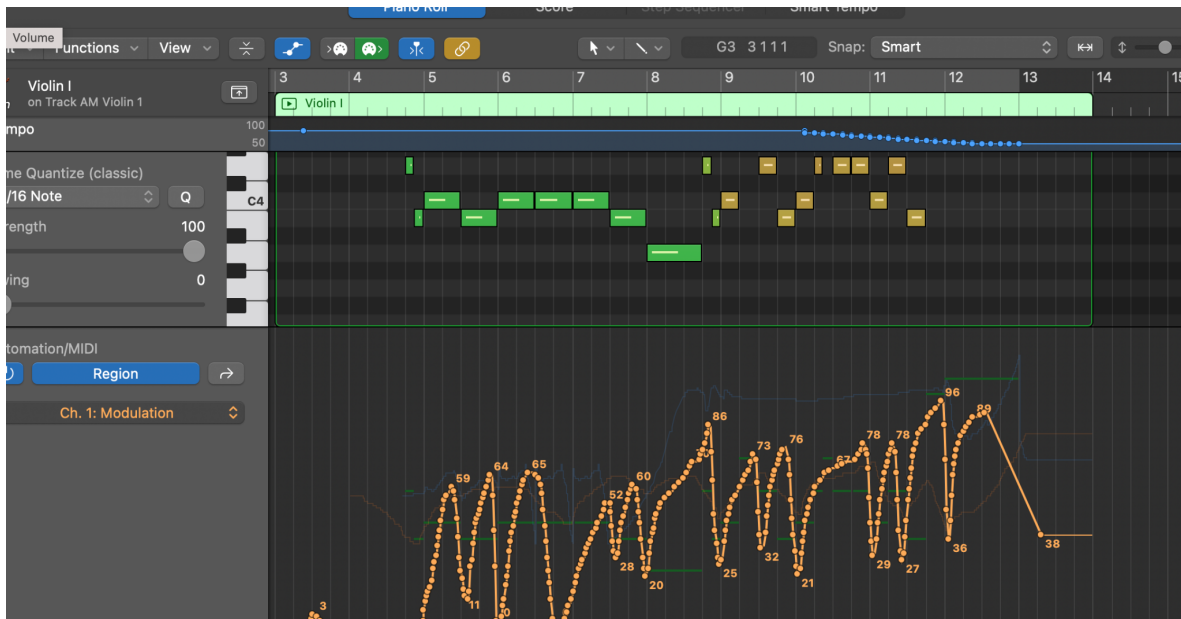
I truly learned a lot through this experience and am currently applying the skills I learned through this grant and the independent study as I write a film score for fellow Miller Arts Scholar Claire Murphy's drama major Distinguished Major Project. In the link is a folder with the orchestral and big band projects I worked on and also the scores of the orchestral arrangements I wrote for my Orchestration II class. Over winter break I finished the big band score, the final version is attached, and it will be performed at the UVA Jazz Ensemble Concert on April 9, 2022. I can't emphasize enough how grateful I was for this opportunity and look forward to applying these tools and skills learned in my future career.

**Link:**

<https://drive.google.com/drive/folders/1KKrZGm2rGFTQaQ9QJ2jZJpp8OA02jUem?usp=sharing>

*Pictures:*

**Orchestral Project**



# Big Band Project

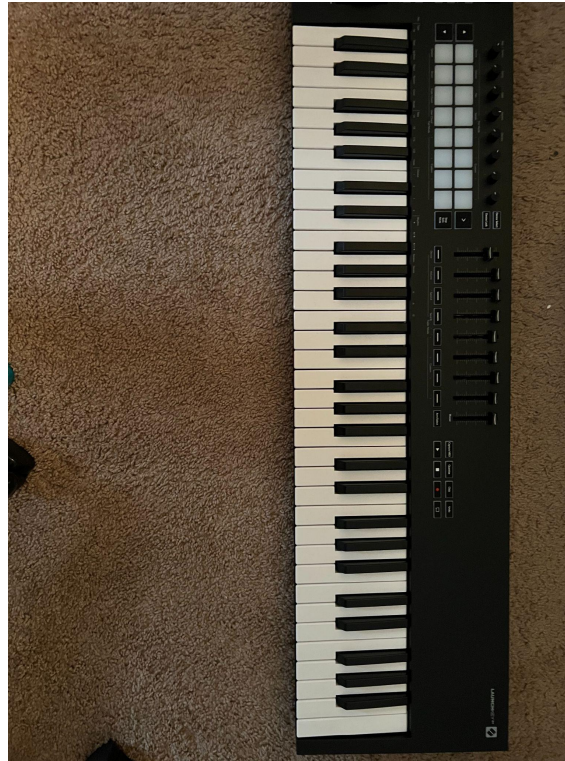
This screenshot shows the Ableton Live interface in the Tracks view for a project titled "McNulty Mixing 11-29 - Tracks". The top bar displays the current time at 01:00:00:00, a tempo of 180.4849 BPM, and a 4/4 time signature. The arrangement is divided into sections: "Intro" (measures 1-5) and "First A" (measures 6-25). The track list on the left includes:

- 9: M S R Tmpt 2 | Ch1
- 10: M S R Tmpt 3 | Ch1
- 11: M S R Tmpt 4 | Ch1
- 12: M S R Trombones
- 13: M S R Tbn 1 | Ch1
- 14: M S R Tbn 2 | Ch1
- 15: M S R Tbn 3 | Ch1
- 16: M S R Bas...mbn | Ch1
- 17: M S Rhythm Section
- 23: M S R Drums
- 24: M S R Highhat 2+4
- 25: M S R Bas...rum | Ch1
- 26: M S R Ride | Ch1
- 27: M S R Fills | Ch1
- 28: M S Origina...dl Files
- 48: M S R RoomT...85\_45

The right side of the interface shows the MIDI and audio waveforms for these tracks. The "Rhythm Section" track is highlighted in purple and contains a MIDI piano roll with notes labeled "SoCal". The "Drums" track is highlighted in green and contains MIDI notes for "Bass Drum", "Fills+Cymbals", and "Fills".

This screenshot shows the Piano Roll view in Ableton Live. The selected instrument is "One Note selected in Bari. Sax.". The piano roll displays a sequence of notes across measures 55 to 71. The notes are primarily in the range of C2 to C4. The piano roll is color-coded by pitch, with green notes for higher pitches and orange notes for lower pitches. The piano roll is set to a 1/16 Note time signature. The left sidebar shows the "Automation/MIDI" section with a "Region" button and a "Ch. 1: Timbre" dropdown menu. The piano roll also shows a velocity curve at the bottom, indicating the dynamics of the notes.

## Hard Drive/MIDI Controller:



## *Budget:*

Keyboard Midi Controller - \$260

<https://www.sweetwater.com/store/detail/LaunchK3-61--novation-launchkey-61-mk3-61-key-keyboard-controller>

External 2TB Hard drive - \$350

BBC Symphony Orchestra Professional - \$1000

<https://www.spitfireaudio.com/bbcso/>

Solo Instrument Library - \$1400

<https://audiomodeling.com/>

**Total Project Cost:** \$3010 (extra \$10 covered out of pocket)