Aaron Willette

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Education

University of Michigan

Class of 2020

- BS in Sound Engineering
 - Minor in Computer Science
 - Minor in Electrical Engineering
- Relevant coursework including Differential Equations, Programming and Data Structures, Introduction to Electronic Circuits, Immersive Media Design
- Current GPA: 3.66

Selected Work Experience

Platform Engineering Team Lead at University of Michigan Crowds and Machines (CROMA) Lab

May 2018 - present

- Developed a distributed, synchronized musical performance system using WebAudio and PubNub
- Constructs and maintains features for Apparition, a crowd-powered UI prototyping tool [https://goo.gl/s7GWV1]
 - Coordinates teammates to build features and fix bugs in a timely manner
 - Responsible for upholding code, documentation, and github best practices

Media Assistant II at Kellogg Eye Center

July 2017 -October 2018

- Recorded faculty lectures for flipped classroom residency program
 - Increased quality of lecture recordings by incorporating post-processing such as equalization, compression, etc.
- Analyzed resident engagement data
 - Automated spreadsheet analysis with custom C++ tool

Skills

- C/C++, Java, Python, Matlab, HTML/CSS/Javascript/jQuery
- Game development with Unity (including virtual reality)
- Audio recording, analysis, and processing
- Team management/leadership
- Two years of German study, six months of Italian immersion

Projects

- **CrowdInC** [https://goo.gl/jdEQFA]: Web-based audience participatory musical performance platform. Features added include real-time bidirectional communication between clients, data logging for statistical analysis, and a comprehensive UI refresh.
- **Spreadsheet analysis tool** [https://goo.gl/R2eMrZ]: Written in C++, used to assist in analysis of resident engagement data at Kellogg Eye Center. Self-directed.
- Creative AI music generator [https://goo.gl/zFMW1t]: Uses trained models to procedurally generate melodies in the style of MIDI training data. Generates accompanying bassline and harmony for each using Max/MSP and UDP communication. Samples trained on video game soundtracks can be heard here [https://goo.gl/4j8cEb].

References

Prof. Walter S. Lasecki Director, CROMA Lab University of Michigan, CSE wlasecki@umich.edu

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