Avneesh **Sarwate**

SOFTWARE ENGINEER · AUDIOVISUAL ARTIST · LIVE CODER

| ✉ avneeshsarwate@gmail.com | 🏠 www.avneeshsarwate.com | 🐙 AvneeshSarwate

Experience

Vimeo *New York, New York*
SENIOR SOFTWARE ENGINEER (UPLOAD TEAM) *July 2019 - Current*
- Built the instant playback capabilities for Vimeo's screen recording product
- Designed and implemented analytics and dashboards for multiple projects, including upload-pipeline performance, and for analyzing user behavior and action paths in the Vimeo interface.
- Presented internally about specific infrastructure decisions and contributed to internal tooling for data analysis and code-documentation.

Georgia Institute of Technology *Atlanta, Georgia*
GRADUATE RESEARCH ASSISTANT (SOFTWARE ENGINEER) *Aug 2017 - May 2019*
- Developed new features for the EarSketch project, an in-browser IDE/Digital-Audio-Workstation for coding education.
- Visited schools to see EarSketch in action and communicated with teachers directly about performance issues.
- Prototyped a Jupyter-notebook style environment for interactive audio programming.
- Implemented single-sign-on system integrating with TunePad.

Yext *New York, New York*
SOFTWARE ENGINEER *Oct 2015 - Dec 2016*
- Contributed to the release of several major Yext products, including Reviews, the Yext Developer Platform, and Xone.
- Built data visualizations in JavaScript using the D3 and Highcharts libraries.
- Built and optimized ETL pipelines for aggregating logs from bluetooth beacons and calculating business metrics

Applied Predictive Technologies *Washington DC*
SOFTWARE ENGINEER *Aug 2014 - Sept 2015*
- Built business intelligence software capitalizing on rich data sets.
- Worked in a continuous integration setting to quickly and flexibly deliver client facing features while managing technical debt.
- Worked closely with product managers in contributing to design, scoping features, and determining development schedules.

Selected Publications

(ALL PDFS AVAILABLE ON GOOGLE SCHOLAR)
- Sarwate, A., Tsuchiya, T., and Freeman, J. " Collaborative coding with music: Two case studies with EarSketch" Proceedings of the Web Audio Conference. Berlin, Germany, September 19-21, 2018
- Sarwate, A., Rose, R., Freeman, F., and Armitage, J. "Performance Systems for Live Coders and Non-Coders" Proceedings of the International Conference on New Interfaces for Musical Expression. Blacksburg, Virginia, USA, June 3-6, 2018
- Sarwate, A. "Calcification and Hybrid Live Coding" Audio Mostly. Norrköping, Sweden, October 4–6, 2016.
- Sarwate, A., and R. Fiebrink. "Variator: A creativity support tool for music composition." Proceedings of New Interfaces for Musical Expression (NIME), Daejeon, South Korea, May 27–30, 2013.

Selected Projects

(DOCUMENTED ON MY WEBSITE)
- **Noisey Nights** - Developed a real-time graphics performance system for Vice's Halloween event, including audio-reactive visuals and Kinnect interaction. Implemented with TouchDesigner and custom GLSL code
- **Paradise Lost** - Developed interactive graphics for an experimental musical theatre performance using TouchDesigner and GLSL, including graphics that interacted with live dancers.
- **Visual Synthesizers** - Developed tools for performing live visuals with musicians, built upon p5.js, Three.js, and custom GLSL.

Education

Georgia Institute of Technology *Atlanta, GA*
MASTERS OF MUSIC TECHNOLOGY *Aug 2017 - May 2019*

Princeton University *Princeton, NJ*
COMPUTER SCIENCE - BACHELOR OF SCIENCE IN ENGINEERING (CUM LAUDE) *Sept 2010 - June 2014*

Skills

Programming Languages	JavaScript, Python, GLSL, Java, C#, PHP, HTML/CSS
Systems and Software	SQL, Git, Linux
Audio	SuperCollider, ChucK, Ableton Live, MAX/MSP
Graphics	WebGL, Three.js, Jitter, TouchDesigner