

Avneesh Sarwate

SOFTWARE ENGINEER · MUSIC TECHNOLOGIST · LIVE CODER

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Experience

Georgia Institute of Technology

Atlanta, Georgia

GRADUATE RESEARCH ASSISTANT (SOFTWARE ENGINEER)

Aug. 2017 - Present

- Develop new features for the EarSketch project, an in-browser IDE/Digital-Audio-Workstation that uses music to teach programming to high school students (<https://ears sketch.gatech.edu/>).
- Work with AngularJS, WebAudio, and Skulpt to create a programming environment where JavaScript and Python can be used to create songs in the browser.
- Lead major refactoring efforts to ready the project for an open source release.

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 the now sunset Xone offering.
- Built data visualizations in JavaScript using the D3 and Highcharts libraries.
- Scoped and executed major refactors of our reporting framework to prevent accumulation of technical debt.
- 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 to help scope features and determine development schedules, as well as participated in design discussions for new features.
- Developed full-stack functionality across the .NET platform.

Publications

(ALL PDFs AVAILABLE ON MY WEBSITE)

- Sarwate, A., Brunc, C., Freeman, J., and Siva, S. "Grading at Scale in EarSketch" Fifth Annual ACM Conference on Learning At Scale. London, United Kingdom, June 26-28, 2018 (To Appear)
- 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 (To Appear)
- Sarwate, A. "Calcification and Hybrid Live Coding" Audio Mostly. Norrköping, Sweden, October 4-6, 2016.
- Sarwate, A., and J. Snyder. "SkipStep: A Multi-Paradigm Touch-screen Instrument" Proceedings of the ICMC|SMC|2014. Athens, Greece, September 14-20, 2014.
- Snyder, J., and A. Sarwate. "The Mobile Device Marching Band" Proceedings of the International Conference on New Interfaces for Musical Expression. London, United Kingdom, June 30-July 4, 2014.
- Sarwate, A., and R. Fiebrink. "Expansion on Description-Based Design of Melodies" Proceedings of the Ninth Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE 13). Boston, Massachusetts, October 14-15, 2013.
- 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.

Education

Georgia Institute of Technology

Atlanta, GA

MASTERS OF MUSIC TECHNOLOGY

2017-Present

Princeton University

Princeton, NJ

COMPUTER SCIENCE - BACHELOR OF SCIENCE IN ENGINEERING (CUM LAUDE)

2010-2014

Skills

Programming Languages

Python, JavaScript, Java, C#, C, HTML, CSS

Systems and Software

SQL, Git, Linux

Audio Software

SuperCollider, Chuck, Ableton Live 9, MAX/MSP

Graphics

WebGL, Jitter, TouchDesigner

Music

Guitar, Bass, Hand-drumming, Singing, Electronic production, Algorithmic music

Sports

Soccer, Volleyball, Ultimate Frisbee, Martial Arts