

Sara Adkins

Computer Science and Music Technology

Contact

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Web & Git

saradkins.xyz
github.com/Satrat

Programming

C, C++, Python, Java,
SML, MySQL, HTML5,
CSS, C#, PowerShell

Software

Max MSP, Pro Tools,
Android Studio,
Matlab, AutoCAD,
Adobe Illustrator

Awards

Deans List Spring '16.
Carnegie Mellon
Holleran Scholar.
Wilkins Scholarship
Recipient.

Relevant Coursework

Intro to Computer
Systems.
Computer Music
Systems.
Theoretical Computer
Science.
Artificial Intelligence.
Multitrack Recording.
Sound Editing and
Mastering.

Education

2014-2018 **Carnegie Mellon University** Pittsburgh, PA
Bachelor of Science in Computer Science and Music Technology
Minor in Sound Design. **GPA: 3.55/4.0**

Work Experience

2016 **Media Systems Engineering Intern** Discovery Communications
Developed software to automate QA scans of incoming media. Assisted in hardware and software design of VR and UHD editing suites.

2015-2016 **Research Assistant** Human Computer Interaction Institute
Researched human response to incorporating haptic feedback into smart-phone applications. Presented Android haptic keyboard application designed for visually impaired users at Meeting of the Minds Symposium.

2015-2016 **Audio Engineer** Vlahakis Recording Studio
Lead recording sessions for local Pittsburgh musicians. Advised clients on microphone selection and placement. Mastered tracks in Pro Tools.

Projects

2016 **Intelligent Computer Accompaniment to Improvisation** Personal Project
Max MSP patch that uses L-systems and pitch detection to generate two harmony lines to an improvised solo in real time.

2016 **Music Composition Algorithms for RobOrchestra** Robotics Club Project
Robotic instruments controlled by a Java AI that uses music theory idioms and Markov Chains to algorithmically generate melodious music in 3 parts.

2015 **Resume Parser and Classifier** YHacks Hackathon Project
Python application that parses PDF resumes to determine most qualified job category. Scores and classifies resumes, outputs rankings in a LaTeX file.

2014 **Kinect Theremin** Personal Project
Max MSP and C# application developed for the Microsoft Kinect that allows the user to create expressive music using their own body as an instrument.

Leadership

2014-now **Project Leader** CMU Robotics Club
Lead a Robotics Club project that aims to design, build, and program robotic instruments that put on autonomous music performances. Design circuits and develop Arduino code to interface robots. Manage funding, run meetings and organize performances.

2015-now **Vice President of Finance** Project Ignite
Secure funding and manage the budget for a CMU start-up organization that provides mentorship and funding for high school students to realize interdisciplinary projects. Manage an average of 10 projects each year.