# Sara Adkins

Computer Science and Music Technology


## Contact

sadkins@cmu.edu
(443) 824-1238

5032 Forbes Avenue
SMC 1569
Pittsburgh, PA 15289

## Web & Git

saradkins.xyz
github.com/Satrat


## Programming

C, C++, Python, Java, MySQL, PowerShell, HTML5, CSS, jQuery

## Software

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

## Awards

Deans List S16,F16.
CMU Holleran Scholar.
Wilkins Scholarship Recipient.

## Relevant Coursework

Artificial Intelligence.
Machine Learning.
Parallel Computer Architecture.
Computer Systems.
Data Structures and Algorithms.
Computer Music Systems.
Theoretical Computer Science.

## 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. Developed a PowerShell script to automate software installs across edit suites in the facility.

2015-2016 **Research Assistant** Human Computer Interaction Institute
Developed Android apps used to investigate human response to virtual texture environments. Designed Android haptic keyboard feature for visually impaired users. Presented research at Meeting of the Minds Symposium.

## Projects

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

2016 **Algorithmic Composition for Robotic Orchestra** 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 and uses Machine Learning to sort candidates into job categories and rank them.

2015 **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 team project that explores the creative possibilities of robotic instruments. Design, build, and program robots that put on autonomous music performances. Manage funding, run meetings and organize performances.

2015-now **Vice President of Finance** Project Ignite
Secure grant funding and manage the budget for a Carnegie Mellon start-up organization that provides mentorship and funding for high school students to realize interdisciplinary projects. Project Ignite oversees 10 high school student projects in Pittsburgh each year.