

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

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

Awards

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

Relevant Coursework

Intro to Computer
Systems.
Data Structures and
Algorithms.
Principles of Functional
Programming.
Computer Music
Systems.
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 a PowerShell script to automate and schedule software installs across the 80 editing suites in the building.

Designed and executed renovations in UHD editing suites to incorporate 4K HDR editing and waveform monitors into existing workflows.

Updated technical drawing sets in AutoCAD for engineering projects.

2015-2016

Research Assistant

Human Computer Interaction Institute

Designed a keyboard application that utilizes haptic feedback to make swipe typing on Android devices more accessible to visually impaired users.

Analyzed human response to virtual textures using MySQL and Matlab.

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 application that uses music theory idioms 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 read music from MIDI data in order to 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.