

# Rico Balakit

2489 Horse Shoe Drive, College Station, TX, 77845 | (210) 508-8774 | rico@balak.it

## Education:

<b>Dwight Look College of Engineering</b> Texas A&M University Fall 2016	Major: B.S. Computer Engineering Related Courses: Microcomputer Systems, Robotics & Spatial Intelligence, Artificial Intelligence, Programming Studio, Electronics, Engineering Ethics, Research (AggiE-Challenge), Game Development, Graphics, Database Systems
--	---

## Projects:

<b>Scratchbot</b>	A 3D-printed Arduino and MIDI based modification to a direct-drive turntable which synchronizes with Traktor Pro DJ software and performs DJ Turntablist scratch patterns in time with the music. Article published on DJ TechTools.
<b>DJ MIDI Display</b>	Modular 3D-printed Arduino, MIDI, and NeoPixel-based DJ performance equipment which displays information such as track volume, equalizer values, song progress, and beat phase on LED displays.
<b>Twitter Media Bots</b>	Python-based Twitter bots that post images and video from Reddit and image databases while generating hashtags. Collects and stores statistics on follower data in a SQL Database. Serves over 41,500 unique twitter followers.
<b>Music Discovery &amp; Archival Tool</b>	Python-based collection of scripts that search for new music on SoundCloud daily and help archive them in full quality, as well as scrapes web pages for related music, downloads, and purchase links.

## Technical Expertise:

<b>Languages</b>	Python, C++, Javascript, PHP, JSON, MySQL, HTML, CSS, Java, Bash
<b>Libraries</b>	Arduino, MIDI, GLUT, Twython, PRAW, Laravel, Bootstrap, jQuery, Angular
<b>APIs, Interfaces, and Protocols</b>	Twitter, Facebook, Discord, Google Maps, Google Drive, SoundCloud, Mediafire, DropBox, Reddit, MIDI, RTMP, HTTP, USB Serial
<b>Operating Systems</b>	Windows, Mac OS X, Unix & Linux
<b>Software</b>	SolidWorks, Inventor, Adobe CS (Photoshop, Premiere Pro, Illustrator, After Effects), Microsoft Office, Cisco CUCM, UNIX, SVN, WordPress, Visual Studio

## Employment & Experience:

<b>ToukuFM</b> Founder, Content Manager, DJ March 2015 - Current	Providing the direction for shows and musical selection on ToukuFM, an internet radio station importing Japanese electronic dance music to Western audiences. On the web development team utilizing the Laravel framework to manage content and integrate our content with rich social media. Designing the branding and graphics for the station as well as networking with the music scene in Japan and in the West. Developing station automation bots & scripts. Building an international team of DJs, developers, and writers.
<b>AggiE-Challenge – Medical Haptic Devices Research</b> Researcher September 2015 - May 2016	Conceptualizing and testing Arduino-based circuits and control systems for a human perception studies testing apparatus mimicking the vibrations of a surgical bone drill. Repurposing electronic music production equipment as a control surface for the testing apparatus.
<b>USAA</b> Network Engineering Intern Summer 2014	Designed and maintained automated call routing systems. Integrated smart features from the call routing systems into public-facing website features.
<b>Texas A&amp;M University – Division of Student Affairs</b> Student Technician May 2013 – May 2015	Created images and graphics for Division of Student Affairs related websites. Designed site mockups and maintained WordPress-based websites. Photographed people, places, and events.
<b>Southwest Research Institute</b> Intern September 2010 – April 2011	Drafted and modelled robot parts and assemblies in SolidWorks for a 30-foot tall robotic arm. Programmed an interactive demonstration routine for a standard robot arm.