developer, audio/video engineer, generalist

Creative technical problem solver, specializing in digital audio and video, web development, and database management. Reliable communicator proven at delivering world-class artistic content on deadline under chaotic circumstances.

Skills

code Python, Javascript, SQL, HTML, CSS, Git, Linux

audio Multi-track recording, Live Sound Reinforcement, Mastering, System Design video Field Production, Streaming, Non-linear editing

Experience

July 2006 -Present

Audio Technician; "The President's Own" United States Marine Band; Washington, DC
<u>http://www.marineband.marines.mil</u>

Responsible for the audio and video needs of the oldest professional musical organization in the United States. Provided technical support for countless performances in concert halls around the country, at the White House, and for high-profile events such as state funerals and presidential inaugurations.

- Planned and executed numerous recording sessions, using digital audio workstation software such as Magix Sequoia, SADiE, and ProTools.
- Built and maintained a web application for Marine Band Members to access and search the band's audio and video archives, as well as rehearsal and reference recordings. This application was built using Python, Flask, SQLAlchemy, JQuery, D3.js, and Bootstrap.
- Conceived and developed a multi-camera video recording and streaming architecture.
- Planned and implemented long-term digital preservation strategies for the Marine Band's audio, video, photo, and document assets.
- Mixed and mastered hundreds of live concert recordings
- Created scripts for automated transcoding of concert and rehearsal recordings
- Provided live sound reinforcement of concerts at the US Capitol, The White House, the Washington Monument, and other indoor and outdoor venues

April 2013 - **Co-Founder: Software**; Service Robotics & Technologies; Washington, DC Present http://srtlabs.com

SRT is a startup attempting to bring advances in robotics to service industries.

- Used ROS environment to control Kuka youBot, iRobot Create and CrustCrawler robots.
- Created URDF and Movelt configuration for 8DOF control of Kuka youBot.
- Developed fiducial tracking system for grasping using SimpleCV.

Sept. 2004 - Director of Operations; "Janet Parshall's America"; Arlington, VA

June 2006 (show no longer active)

Responsible for all technical aspects of the three hour, nationally-syndicated talk show, distributed by the Salem Radio Network and FamilyNet Television to approximately 150 radio and 250 television affiliates.

July 2002 - Production and Creative Services; WHSV-TV3; Harrisonburg, VA

Sept. 2004 http://www.whsv.com

Worked in all facets of local news broadcast production. Wrote, shot, and edited commercials for the station's clients.

- Served as Technical Director, Graphics Operator, Audio Mixer, Camera Operator, and Video Editor for news broadcasts.
- Edited video using both linear and non-linear (Final Cut Pro) systems.

Education

Dec. 2003 Bachelor of Music, Music Industry, James Madison University; Harrisonburg, VA

Projects

Movie, Presto! (http://moviepresto.com)

Search and metadata website for movies, with links to various legal viewing options. Created algorithm for matching movies across various APIs without there being a unique identifier. Built with Python, Flask, JQuery, and Bootstrap, and hosted on Google App Engine.

Crotale (<u>https://github.com/esonderegger/crotale</u>)

Crotale is a web application and virtual appliance for processing audio using EBU R128 loudness standards. It is built using Ubuntu Linux, PostgreSQL, Flask, FFmpeg, SQLAlchemy, and JQuery.

Just Another Generator for Static Sites (<u>https://github.com/esonderegger/jagss</u>) Static HTML site generator written using Python, Jinja2 and LESS.