# Siva Muthusamy

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## EDUCATION

### WASHINGTON UNIVERSITY

BS in Biomedical Engineering
2009 - 2013 | St. Louis, MO
College of Engineering

## LINKS

Github:// TheSivaMuthusamy

## SKILLS

### LANGUAGES

Strong:
Javascript • Python • Java • Ruby
HTML • CSS
Familiar:
SQL • MATLAB

### FRAMEWORKS & LIBRARIES

React • Redux • Mocha • Rails
Swing • scipy

### OTHER

git • node • npm • webpack

## PROJECTS

### YOUTUBE REACT CLIENT

Demo: fake-tube.firebaseapp.com/
Source: github.com/TheSivaMuthusamy/Fake-tube

- Youtube React web client that can search and play videos from youtube
- Most of app components managed with a global Redux store

### VOTING APP

Client Source: github.com/TheSivaMuthusamy/voting-client
Server Source: github.com/TheSivaMuthusamy/voting-server

- Server, built with Node.js, and Client, built with React and Redux, of a voting application that pits two entries from a set of entries until there is one winner
- Application has the ability to restart the current vote if one so chooses
- Each client can only vote once and is prevented from voting again

### SOUNDCLOUD ELECTRON APP

Source: github.com/TheSivaMuthusamy/Soundcloud-Electron

- Soundcloud player built with React along with browserify and subsquently packaged with electron
- Has search component to explore Soundcloud's library

### OTHER PROJECTS

Sources: github.com/TheSivaMuthusamy/

- React and electron based task-list app; Source: /To-Do-List
- Rails instagram clone; Demo: shielded-plains-78697.herokuapp.com
- Java shooter game; Download: thesivamuthusamy.github.io/Shooter.jar

## EXPERIENCE

### NATIONAL INSTITUTES OF HEALTH Postbac Fellow

September 2014-November 2016 | Bethesda, MD

- Human, monkey, and rat medical image registration (rigid, affine, and nonlinear) within and across medical imaging modalities using MATLAB
- Segmented rodent brain images with neural networks initialized with stacked denoising autoencoders in MATLAB
- Voxel-based multiple regression analysis of clinical PET data using MATLAB
- Statistical analysis of experimental data using ANOVA and Student T-tests with Python 3
- Mixed model analysis of experimental data employing R programming language with nmle package
- Non-programming analysis with a variety of medical imaging software(PMOD, FSL)

### NON-PROGRAMMING EXPERIENCE

2011-2012

- Consulting Intern in summer 2012 helping University of Michigan's Biomed Department meet new government directives
- Administrative Intern for Valley Presbyterian Hospital in Van Nuys, CA in summer 2011