

Josh Terrell

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Strengths

Understand software to find problems and improvements; uncover and understand the needs of customers to design solutions; write effective, tested software solutions; self-manage; communicate clearly and respectfully; work honestly and diligently; strive to understand, contribute, and grow.

Work Experience

Software Development Engineer

java

Amazon – San Luis Obispo, CA

2016–present

Data Scientist / Software Engineer

tensorflow, python, sklearn, scipy, bash, R, ggplot, git

SentiMetrix – Bethesda, MD

2015–2016

Research and engineer language-independent features to infer the emotional state of speakers using their speech recordings. Design and implement a voice-processing pipeline to extract audio spectrum, graph spectrograms, detect voice activity, and extract voice features. Create a rest server used to invoke the pipeline with a sound clip and asynchronously acquire results.

Place 1st in the 2016 Harvard-sponsored N-GRID classification challenge. Predict the severity of patients' symptoms using textual medical records (mae=0.14). Study the raw textual records to find structure. Utilize the semi-structured nature of the raw data to extract a tabular form of the data. Engineer interaction features. Sensibly impute missing values. Train classifiers and ensembles. Paper: joshterrell.com/NGRID_JBI.pdf

Successfully classify depression from text-based features (auROC=0.84). Build, configure, and train classifier-pipelines. Employ feature reduction techniques. Report results using charts, tables, and summary statistics. Co-author a research paper on methods and results.

Design and engineer a neural network model to determine the presence of substrings within a string of characters; substrings take on a plethora of forms and lengths (details omitted). Learn, become proficient at, and carefully combine convolutional neural net layers, long-short term memory layers, and fully connected layers to build a tool achieving great precision and good recall.

Research Intern

nodejs, mysql, java, webdriver, R, ggplot, git

Developer Liberation Front – NCSU

Summer 2015

Research gender bias in the acceptance of github pull requests. Match to control for covariates. Design an sql database. Write queries and procedures. Plot graphs to visualize the data. Scrape and cleanse pull request and gender data. Co-author a research paper on methods and results. Paper: peerj.com/articles/cs-111

Quality Assurance Engineer

mysql, php, javascript, webdriver, nodejs, html, css, git

iFixit – San Luis Obispo, CA

2013–2014

Design, develop, and test a new open-source project, Pulldasher. Pulldasher is a github-integrated dashboard which displays pull request progress to development teams. Develop, test, approve, and deploy new features and patches for the iFixit website and iFixit's subsidiary, Dozuki. Cover the codebase with automated unit tests and front-end tests.

Accomplishments

B.S., Software Engineering

California Polytechnic State University – San Luis Obispo, CA

2016

Eagle Scout

Boy Scouts of America, Troop 91 – Santa Maria, CA

2008