

DAVID SIAH

Phone: (610) 585 7327 | Email: Dsiah@villanova.edu | Code Samples: Github.com/dsiah
Address: 1047 Derwydd Lane, Berwyn PA 19312

EDUCATION

VILLANOVA UNIVERSITY, LIBERAL ARTS AND SCIENCES

B.S. in Computer Science

Villanova, PA
Graduation Date: May 2017

Major GPA: 4.0 [Cumulative GPA: 3.54]

Minors: Business, Japanese

Honors: Deans List & Upsilon Pi Epsilon (Computer Science Honor Society)

PROFESSIONAL EXPERIENCE

HARVEY MUDD COLLEGE

Undergraduate Researcher

Claremont, CA
June 2015 – Aug. 2015

- Participated in the Harvey Mudd REU program conducting research as a member of the Impro-Visor Intelligent music software project
- Wrote software that could process a monophonic audio signal and determine pitch in real-time using the Supercollider programming language
- Implemented a Learning Vector Quantization Neural Network using Python to train and categorize drum samples by instrument. Used frames from Short-Time Fourier Transform of drum recordings as training dataset for the network.

WIZEHIVE

Web Development Intern

Conshohocken, PA
Apr. 2014 – Feb. 2015

- Wrote various reusable controllers and services for clients using Angular.js framework
- Applied Test Driven development techniques by writing unit and regression tests for the Zengine Platform using Selenium Web Driver
- Participated in Agile software development process by attending product backlog meetings and using JIRA Scrum board to plan, estimate, and review backlog stories
- Maintained best practices of frontend development by writing and organizing modular frontend components

PERSONAL PROJECTS

REDDIT-TO-SPOTIFY PLAYLIST GENERATOR

- Used jQuery to scrape the front page of the r/Music Subreddit and compile a list trending songs for each day
- Wrote a server in Node.js that used the Spotify Web API and OAuth 2.0 to authorize user logins as well as allow the user to compile and import the new playlist to the user's endpoint
- Hosted the application on AWS using Amazon Elastic Beanstalk and Relational Database Service
- Used Git branches to integrate changes to the project while maintaining the site and preventing downtime

TWITTER POLITICAL TREND ANALYSIS

- Set up a pipeline to filter and save tweets containing political keywords from the Twitter Streaming API
- Using the Latent Dirichlet Allocation algorithm, sorted the tweets from each day into 30 categories
- Researched and implemented a method to statistically indicate the importance of words in each tweet relative to a political lexicon
- Ordered the words in each category using the rank in order to extract the top 5 words in each category and discover themes for each category

AWARDS & EXTRACURRICULAR ACTIVITIES

- First Place at CCSC Eastern Region Programming Competition (ACM Programming Team) Oct. 2015
- Third Place at Hack Dartmouth II Oct. 2015
- Lead Frontend Developer, Villanova CSC Web Site Redesign Jan. 2015 – Present
- Treasurer, Beta Theta Pi – Zeta Epsilon Chapter Jan. 2014 – Jan. 2015

ADDITIONAL INFORMATION

PROGRAMMING LANGUAGES: JavaScript, Python, Java, Supercollider, Bash, & Clojure

DATABASES & TECHNOLOGIES: MySQL (SQL), MongoDB (NoSQL), Unix, Git, AWS

HOBBIES: Chess, Cooking, Creative Writing, and Functional Programming

LANGUAGES: English (native), Farsi (conversational), French (conversational), Japanese (elementary)