

Shengyi (Costa) Huang

3300 Poinsett Highway
Greenville, SC, 29613
(864) 501-6630

Shengyi.Huang@outlook.com
<https://CostaHuang.me/>

EDUCATION

Furman University, Greenville, SC

Fall 2013—December 2017

- Bachelor of Science
- Computer Science and Mathematics (Double Major)
- Graduation date: May 2018
- Cumulative GPA: 3.329

EXPERIENCE

Teaching Assistant for Web Programming

Fall 2017

Furman University Computer Science Department, Greenville, SC

- Experimented with the newest front-end and back-end technologies with the professor
- Assisted students with VueJs, Webpack, Vuetify, and Laravel development
- Set up deployment procedure by using Cloudways

Furman Research Fellow

Summer 2017

Furman University Computer Science Department, Greenville, SC

- Conducted research on travel plan recommendation based on historical traffic flow data
- Published an open-source server package that crawls traffic flow data (<https://github.com/streettraffic/streettraffic>)
- Set up proper unit-tests and documentation by using Sphinx (<https://streettraffic.org/docs/docindex.html>)

Vice President of Technology

Fall 2016—Spring 2017

Furman University Investment Club, Greenville, SC

- Founded <http://portfolio.fuinvestment.com/> that shows equity curve, portfolio, and transactions history
- Used Google Script to automatically record portfolio value every day for quarterly analysis

Tax Intern

Spring 2015

Volunteer Income Tax Assistance (VITA), Greenville, SC

- Studied and passed the “VITA Volunteer Assistor’s Test”
- Volunteered at VITA (United Ministries Site) for 5 hours a week to help people to prepare tax returns
- Talked to clients to get essential information and discussed with site coordinators about details of preparing tax returns

PROJECTS

Reproduction of Deepmind's StarCraft II Research

Fall 2017

<https://costahuang.me/SC2AI/>

- Utilized Openai Gym to interact with Pysc2, the SC II Learning Environment
- Successfully incorporated Tensorforce, a reinforcement learning framework, to train SC II game agents
- Constructed maintainable and *understandable* machine learning code

Linear Programming for Optimal Scheduling

Fall 2017

https://github.com/vwxyzjn/LP_optimization_python

- Modeled the scheduling problem as a Linear Programming Problem and used Gurobipy to produce an optimal solution through the simplex method

Sentiment Analysis of Movie Review

Fall 2016

<https://costahuang.me/research/LSTM-RNN-For-Sentiment-Analysis>

- Used neural network to classify movie reviews based on sentiment
- Improved prediction accuracy on Keras's official demo code from 82.35% to 88.75%

OPEN-SOURCE CONTRIBUTION

TensorForce: A TensorFlow library for applied reinforcement learning

Fall 2017

<https://github.com/reinforceio/tensorforce>

- Added a parameter in the environment API to allow user to visualize the training within the Gym's environment
 - <https://github.com/reinforceio/tensorforce/pull/242>
 - Merged
- Fixed a bug that involves incorrect handling of multiple actions returned by the agent
 - <https://github.com/reinforceio/tensorforce/pull/244>
 - Merged

Python Extension for Visual Studio Code

Summer 2017

<https://github.com/Microsoft/vscode-python>

- Modified the underlying autocompletion module to enable variable reference on PEP 526 notation
 - <https://github.com/DonJayamanne/pythonVSCode/issues/1101>
 - Merged

Vuetify Material Component Framework for Vue.js 2

Summer 2017

<https://github.com/vuetifyjs/vuetify>

- Made starter templates for users to do rapid prototyping.
 - <https://github.com/vuetifyjs/docs/pull/181>
 - It's now live at <https://vuetifyjs.com/pre-made-themes>
 - Merged