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Shengyi (Costa) Huang

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 backend 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 documentations 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

- Model 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 trainings 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