Xuanyi Zhu (Steven)

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Education

University of Illinois at Urbana-Champaign **08/2014 – 05/2019**
Master of Science in Computer Science, Bachelor of Science in Computer Science ***GPA: 3.8/4.0***
Dean's List: Spring&Fall 2015, Spring&Fall 2016, Spring&Fall 2017, Spring 2018
The Mathematical Contest in Modeling Successful Contestant
Relevant coursework: Data Structures & Algorithms Database & Distributed Systems System Programming HCI and Signal Processing Machine Learning & Artificial Intelligence Data Mining

Skills

Languages: Java, Python, PHP, JavaScript, C++, C, SQL, CSS, HTML, Haskell, R, MIPS Assembly
Software/Tools: Tensorflow, Scikit-Learn, Git, MVC, IntelliJ, Oracle VM VirtualBox, Android Studio, WebGL

Experience

ArcSoft, Inc. | Hangzhou, China **07/2018 – 08/2018**
Full Stack Web Developer Intern *(PHP, JavaScript, JQuery, AJAX, HTML, SQL, Bootstrap, CodeIgniter)*
• Built a market inventory management system for the product-manager team to help them track and analyze the current market and reduce the labor/time costs.
• Enhanced the system security by establishing a hierarchical data access and manipulation authorization mechanism and setting different administration account levels with different features and pages accessibility.
• Used the HighCharts library to achieve customizable data analysis and visualization between different SQL tables with pie charts and heat maps.
• Added supports for data editing, searching, filtering, importing and exporting to help users interact between frontend and backend. All code was reviewed and pushed to production.

Zoom Video Communications| San Jose, CA **05/2017 – 08/2017**
ML/AI Software Engineer Intern *(Python, Tensorflow)*
• Used Python and Tensorflow to build neural networks (MLP, CNN, LSTM) that classify noise and human sound to achieve noise reduction/cancellation goals(achieved 97% accuracy).
• Gave ML/AI lectures to the engineering team to help them quickly grasp the principle machine learning knowledge; Wrote a machine learning concept and resources tutorial book to help employees get started more easily with the ML/AI project.
• Delivered the project with minimal supervision; collaborated closely with a wide range of engineering teams and gave multiple presentations of analysis results to executives.

Zhejiang Modern Photography Academy | Hangzhou, China **10/2014 - 02/2017**
Website Maintenance Intern *(JavaScript, HTML, Wireframe)*
• Designed/optimized layouts and photoshopped pictures to achieve more user-friendly interfaces.
• Improved the website quality by modifying formats and conducting experiments using empirical user study.
• Performed statistical analysis based on the website's visitor data to enhance website efficiency.

Projects

Tweet Normalizer Application(Python,Electron,JavaScript) **Spring 2018**
• Developed a supervised-machine-learning-based system to perform lexical normalization for English Twitter text: generates candidates based on past knowledge and a novel string similarity measurement and then selects a candidate using features learned from training data.
• Selected large real-world datasets to train the model with the random forest classifier.
• Implemented OAuth login feature. Used Electron and Vue.js to implement a GUI which real-time interacting with the Twitter API, parsing and displaying the data in the application interface.
• Supplied a user-aided revision feature that the normalization engine can iterate and improve itself.

Data Science Projects Collection (Python) **Fall 2017**
• Wrote a pattern discovery program that performs frequent pattern mining on datasets and outputs the regular/closed/max patterns; Implemented an Apriori-based program to identify outlier resilient itemsets.
• Built a general-purpose classification framework using decision trees and random forests.
• Constructed an Epsilon-greedy Q-learning reinforcement agent on a single-player version of Pong.

Interactive Computer Graphics Projects Collection (WebGL) **Fall 2017**
• Built a flight simulator game. Generated the terrain using the Diamond-Square algorithm. Used Blinn-Phong illumination model and Phong shading with a colormap. Added a weather-change feature.
• Rendered a system of rainbow-colored bouncing spheres in 3D with the effect of gravity and friction.