Oliver Shi

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Education

University of Virginia SEAS – BS Computer Science Major   Graduating May 2019
— GPA: 3.524, Computer Science GPA: 3.657, Dean's List 2016 Spring

Thomas Jefferson High School for Science and Technology
— GPA: 4.27, Siemens Regional Finalist (Summer 2014), National AP Scholar

Software Development

Software Engineering Intern – Yext (Summer 2018)
— Helped Yext streamline limited field type architecture with the goal of increasing scalability and adding the ability to handle multi-faceted business data, allowing the company to easily expand to new field types. I made daily use of the Immutables, Google Guava, and Google Protobuf libraries as well as software design patterns like builders and visitors
— Improved validation architecture to use directed acyclical graphs (DAG) to improve performance by removing validation test redundancies and adding new unit tests for our TeamCity continuous integration
— During the Yext hackathon I created a machine learning algorithm for correctly categorizing user field types into the correct Yext field type with 97% accuracy using python NLTK neural networks
— Improved and added new UI features written in ReactJS for the Yext Knowledge Manager

LimitlessPiano - HackUVa (March 2018)
— We designed and implemented a VR piano: our goal was to make piano more accessible for disabled audiences
— Limitless piano was created using C# in Unity in a team of four, integrating with Oculus VR and Leap Motion sensors to provide physical interaction with users: we were awarded the $100 prize for Project Originality

FanFeels - HoyaHacks (January 2018)
— Created a data visualization application in a team of four for measuring fan sentiment of English soccer teams
— Scraped and analyzed data of the top 6 English Premier League teams from Reddit sub-threads, using the TextBlob library for natural language processing (NLP) and Python Reddit API Wrapper (PRAW) for scraping data from reddit
— We leveraged nvd3.js for data visualization and Django as our web framework

Software Engineering Intern – Oath (AOL/Yahoo) (Summer 2017)
— Improved company front-end to use AngularJS, also learned AngularJS from scratch without external technical assistance
— Added an employee paging feature by making REST calls to an internal service and new UI for creating AOL AWS accounts
— Presented weekly to the rest of team to teach front-end, and participated in daily stand-up

Dome (Fall 2017)
— Worked in Unity with C# in a team of four to make "Dome", a roguelike shoot-em-up game set in a futuristic world

Portfolio Website (oshi97.com)
— Runs on an Amazon EC2 instance and is a single page application using AngularJS

Teaching

CS 2501 Teaching Assistant (Fall 2018)
— Computer Organization and Architecture 1 (COA1) is a pilot class for the new Computer Science curriculum at UVa
— Currently helping students with C and assembly, I am also in charge of a lab section and help design and plan new curriculum material

CS 2110 Teaching Assistant (Spring 2018)
— Taught students Java, OOP concepts, and data structures during office hours as well as administering lab once a week

Madison House Tutoring (Spring 2016)
— Helped high school students at Monticello High learn geometry

Coursework

Computer Science: Algorithms, Theory of Computation, Discrete Math
CS Electives: Compilers, Computer Graphics, Computer Vision, Artificial Intelligence, Computer Game Design
Software Development: Advanced Software Development, Software Development Methods
Computer Architecture: Computer Architecture, Program and Data Representation, Digital Logic and Design
Math: Differential Equations, Probability, Linear Algebra, Multivariable Calculus
Other: Fiction Writing, Musicianship 1, Music Theory 1, Introduction to Philosophy

Knowledge

Programming Languages:
— Java, Python, C#, JavaScript, HTML, SASS/LESS/CSS, C, C++

Software Libraries/Frameworks:
— React, AngularJS, JQuery, Bootstrap, Soy templates
— Play framework, Django, JUnit, Mockito, Immutables, Guava, Protocol Buffers

Source Control and Continuous Integration: Git, npm, Github/Stash, Jenkins, TeamCity, Gerrit
Teamwork Tools: JIRA, Slack, Techops
Other Technologies: Unity, Amazon EC2, Apache, SSH, Putty/WinSCP, REST, SOAP, Edward, crontab, Docker, HAproxy, rabbitmq