John Sullivan

PDF Version | org-mode plaintext | On my website

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References available upon request

Education

- B.S. Computer Science, CSU Monterey Bay, May 2018
- Eagle Rock High School, June 2014

Experience

Freelance Software Developer

January 2020 | Los Angeles/Remote

- Provide technical services to clients, such as backend software or web development
- Determine scope and outcomes for client projects
- Consulting for software installation, hosting, etc
- Delivered such products as a scheduler for an interactive LED display at the LA Music Center, multiple client portfolio websites, and more

Co-Founder/Software Developer | Spodder

August 2019 | Remote

- Allows users to anonymously add and discover 'beacons' on a shared map, which detail local places and events
- Created mobile app using React Native/React-Redux with integrated analytics tracking and more

Software Engineer II | Capture2

July 2018 - August 2019 | San Diego, CA

- Created reporting integrations for Office365 using ReactJs, allows customers to create reports using tools they're already familiar with
- Implemented a search-by-location capability for govt business opportunities, allowing customers to easily find opportunities in places relevant to their business
- Eliminated wasted time and human error from manually deploying backbone architecture by automating with Azure RM templates, Ansible, and Docker
- Deployed and maintained a set of polyglot backend REST API services which added critical features, including technologies implemented in C#, Java, and Python
- Used Kibana to identify search performance bottlenecks and improve customer experience

Teaching Assistant | TA++ Program, CSUMB SCD

August 2016 - June 2018 | Seaside, CA

- Delivered quality instructional assistance to the Intro, Multimedia, and Web programming classes
- Advised students on technical considerations for python multimedia projects
- Collaborated on an engaging intro programming curriculum including in class labs, study sessions, and extracurricular activities
- Directed Peer-Led-Team-Learning sessions that improved student cooperation and practical problem-solving skills

Undergrad Researcher | CSUMB-UROC Research Internship

May 2016 - August 2017 | Seaside, CA

- Synthesized original research in computer input peripherals
- Used data science methodologies/scikit to test signal processing and classification techniques
- Assisted in other VR/peripheral related projects in a cooperative lab environment

Computer Repair Volunteer | Loaves Fishes and Computers

September 2017 - January 2018 | Salinas, CA

- Technician assisting with refurb of computers for in-need community members
- Wrote software for automated hardware lifetime checks & issue reporting
- Assisted customers one-on-one in technical support and consultation

Highlighted Projects

AttentiveAI | Using ubiquitous 5G for classroom engagement

Winner of ATT 5G Hackathon – Best use of Cloud Technology

- Application that gives teachers realtime information on classroom attention, using computer vision and IoT devices. Consulted on the concept and provided guidance for using React Native

Trumpbot | RNN trained on tweets to generate new messages

Github Repository/Jupyter Notebook Report

- Takes tweets from @realDonaldTrump and creates new messages. Uses preprocessing techniques in sklearn and an RNN-based text generator written in tensorflow

Flex | Hand gesture recognition using muscle flexing sensors

ACM Digital Library

- Novel gesture sensor intended for use as a general-purpose remote control
- Used multiple recurrent neural networks in a bagging configuration to classify gestures used by the Myo sensor
- Developed driver code for the sensor, recording framework for collecting gesture samples, implemented classification techniques

Multi-Leap | Multiple LeapMotion controllers on one machine

Demo on YouTube

- System that allows for multiple people to use an interactive projection surface at the same time
- Multiple leapmotion hand trackers on one machine, multiplexed through systemd-nspawn
- Doesn't require any virtual machines, fault-tolerant
- Can be used over the network or locally for interactive applications

Skills

Experience Areas	Languages/Tech	IT/DevOps
Operating Systems	C++ • C# • C • Rust	Ansible • Docker • AWS • Azure
Data Mining	Java / Android • Clojure[Script]	Linux/*nix Admin/Support
Machine Learning	JavaScript(ECMA) • React.js/Native	Windows Setup/Support
Graphics Programming	Python • Flask	Unix Tools/Scripts
Multimedia Programming	Unix shell	Git collaboration, build hooks, CI
Software Design	Unity3D	
Game Programming	TCP/UDP Sockets	
Computer Networking	Elastic Stack • ASP.NET Core • SQL Server	
	OpenGL/DirectX • R	
	SciKit Learn • Tensorflow	
	REST API Design • GraphQL	