Neil Routley

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Available: May - December 2019

EDUCATION

Northeastern University, Silicon Valley, CA   January 2018 - present
Candidate, Align Program for a Master of Science in Computer Science, GPA: 3.52/4.0   Expected graduation: May 2020
Related Courses: Programming Design Paradigm, Introduction to Object Oriented Programming,
            Systems, Algorithms, Managing Software Development, Web & Mobile Development

Cabrillo College, Aptos, CA   January 2016 - May 2018
Related Courses: Java Programming 2, Cloud Programming in Python, Responsive Web Design, Calculus 1-3
Activities: Vice President & Python Team Lead of Cabrillo Robotics Club

San Jose State University, San Jose, CA
Bachelor of Music in Music Education, GPA: 3.49/4.0   May 2014
Related Courses: Java Programming

TECHNICAL KNOWLEDGE

Languages:	Python3, Java8, C/C++, HTML5, CSS3, JavaScript, BASH
Systems:	Windows XP/7/8/10, macOS, Linux, Robot Operating System (ROS)
Software:	Word, Excel, PowerPoint, Illustrator, Photoshop, InDesign, XD, Fusion 360
Tech:	Git, Flask, Bootstrap4, Google Cloud Platform, Amazon Web Services, OpenCV, Jenkins, Jira, SonarQube

PROJECTS

Java Cloud Messaging Application – Northeastern 2018   December 2018
- Agile/Scrum team project – Deployed command line cloud messaging service to AWS EC2 using RDS(MySQL) database for user, group, and messaging persistence written in Java including Junit tests, and CI with Jenkins, Git, Jira, and SonarQube.

Arduino Robot - Line Follow and Table Robot   May 2018
- Designed and programmed 3D printed Arduino robot utilizing IR sensors. Coded in C/C++ to complete line maze, and, drive the length of a table and back without falling off, completing level 1 table-bot challenge at Home Brew Robotics Club

Robotics Club Rovers - NASA Swarmathon Competition 2018   April 2018
- Project team lead assigned to improving and increasing robot block acquisition success rate +60% through improved logic and application of OpenCV; collaborated with teams to solve odometry, mapping, and obstacle avoidance; physical and simulation testing using Python2.7, C++, ROS1, and Gazebo - 3rd Mission to Mars/4th Physical Rover

Madlib Creator Web Application - https://madlibwall.appspot.com/   December 2017
- Python Flask web application deployed to Google Cloud Platform that allows the creation of your own madlib that, once filled out, will displayed to the user along with a random selection of stored madlibs. A copy of the completed madlib is then stored into a Google Datastore NDB.

Business Website – http://www.surfcruzcustoms.com   December 2017
- Auto repair website for a small business including Google Analytics and an AdWords campaign. Website written using PHP, HTML5, CSS, and JavaScript.

WORK EXPERIENCE

Northeastern University, Silicon Valley, CA   May 2018 - present
Graduate Teaching Assistant & Align Ambassador
- Mentored and guided multiple students experiencing difficulty transitioning into Computer Science from unrelated fields
- Assisted professor in presenting the distributed publish/subscribe messaging system utilized in the Robot Operating System

Surfcruz Customs, Inc., Santa Cruz, CA   February 2011 - present
Fabrication Technician
- Elicit requirements from clients to solve problems though design, fabrication, and assembly of custom parts
- Create company website and maintain Google analytics and ads using HTML5, CSS3, JavaScript, and PHP

Law Office of Mary Lee Crooks, Soquel, CA   January 2006 - February 2018
Executive Legal Assistant
- Modernized computer and network infrastructure to improve reliability and productivity between office employees
- Continually minimized office expenditures while increasing professional services through research and negotiations

INTERESTS/ACTIVITIES

- Founding Board Member of student chapters for ACM and IEEE at Northeastern Silicon Valley
- Computer Vision, classic automobiles, 3D modeling and printing, basketball, drums and piano, mountain biking