Samantha Wang

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SKILLS

Programming Languages
· Python
· C
· Matlab Simulink

Tools and Platforms
· Agile methodology
· Git
· Jira

Languages
· Fluent English
· Fluent Mandarin Chinese

WORK EXPERIENCE

SENIOR SOFTWARE CONTROLS ENGINEER | RIVIAN | SEPT 2021 - PRESENT
· Develop controls software for energy storage products using Matlab Simulink and C
· Write software requirements and design diagnostics to meet ANSI and IEEE 1547 standards for electric power systems, distributed energy resources and their communication
· Create Python tools for software code generation, error checking, and data visualization
· Worked cross-functionally in an Agile environment focused on CI/CD

SOFTWARE ENGINEER, SCRUM LEAD | GENERAL MOTORS | AUG 2018 - SEPT 2021
· Led software development of column shifter using industry-leading SENT communication
· Developed software to read column shifter movements and interpret desired range of user
· Managed work and progress for 14-member scrum
· Designed safety-critical, requirements-based algorithms in C for features such as Driver Exit AutoPark, Key Off AutoPark, and Neutral Double Tap
· Coordinated directly with suppliers to communicate requirements
· Worked with systems and validation engineers from conceptual design to working product
· Troubleshot system-level problems across multiple embedded controllers
· Tested software changes in SIL/HIL simulations and in vehicles

HARDWARE TEST ENGINEERING INTERN | APPLE | SUMMER 2017
· Designed test fixtures and tests for microphone and speaker validation
· Performed ANSYS acoustic simulations using finite element analysis

SOFTWARE ENGINEERING INTERN | DELL SONICWALL | SUMMER 2016
· Researched and applied machine learning algorithms to website text classification
· Wrote Python scripts for data analysis

TEST AUTOMATION INTERN | SPICEWORKS | SUMMER 2015
· Worked on both manual and automated software testing of web application
· Used Ruby on Rails and Watir-Webdriver framework
· Created internal application for test result visualization using Jenkins, MongoDB, and PostGres APIs

EDUCATION

CARNEGIE MELLON UNIVERSITY | PITTSBURGH, PA

M.S Electrical and Computer Engineering	May 2018
B.S. Electrical and Computer Engineering	May 2017
Minors: Operations Management, Supply Chain Management, Audio Engineering	

PUBLICATIONS

HIRERANK: A NEW METHOD FOR RANKING UNIVERSITY GRADUATE PROGRAMS
Co-Authored with Bolun Huang and Dr. Narasimha Reddy
· Published by the American Society for Engineering Education – April 2015