Raleigh, North Carolina LinkedIn: https://www.linkedin.com/in/tristan-hall

GitHub: https://github.com/halltristanj

Software Engineer



Professional Experience

Software Engineer, Cisco (Contractor) | Raleigh, NC (2019 – Present)

- Engineered Python software, Docker containers, shell scripts, and robot framework test suites for security test automation on Cisco cloud offerings including host machine NTP client configurations and web app vulnerabilities
- Built Docker containers for python unit testing to achieve 100% code coverage using pytest
- Developed and maintained CI/CD pipelines with Jenkins on GitHub
- Contributed to code reviews to provide valuable feedback on code functionality and optimization

Software Developer, Republic Wireless | Raleigh, NC (2017 – 2019)

- Developed back-end Python software which replaced and enhanced a subscription data flow service by integrating ETL processes between Anaplan and NetSuite REST APIs resulting in company savings of \$200,000/year
- Integrated UPS and FedEx APIs into software for near-real-time shipment reporting which allowed for Member Services to engage with customers on any delays in their order shipment
- Managed and then migrated a supply chain data warehouse with over 100 tables, approximately 50 ETL software scripts including SQL, Python, JSON, and crontab languages/formats (version controlled with Git) to a new data warehouse to increase data security and reduce costs
- Provided analytics to stakeholders on member characteristics to assist in providing a more fulfilling user experience
- Began engineering a smart dynamic order routing API in Python and separately engineered a user interface using Google Apps Script (similar to JavaScript) in Google Sheets as a decision-making tool for the API
- Created and managed personal task pipelines to complete high-priority engineering tasks in a timely manner
- Engineered scalable SDKs and wrappers for efficient code debugging and upgrading
- Engineered software to automate tasks for stakeholders saving some more than 60 minutes/day

Education

Ph.D., Meteorology, 2019 | Florida State University, Tallahassee, Florida

- Engineered a hurricane rainfall product in C based on regional, environmental, and storm-specific parameters in a statistical framework using 10 years of rainfall data and hurricane analyses
- Computed verification statistics for hurricane rainfall for the GFS and my model on over 3,600 forecasts using Python,
 GrADS (a meteorological scripting language), and shell scripting

M.S. in Meteorology, 2014 | Florida State University, Tallahassee, Florida B.S. in Physics; B.S. in Geography, 2010 | Appalachian State University, Boone, NC