Cassie Q. Xia

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Objective

Recent electrical engineering graduate with three summers of internship experience varying from automation to modeling to fault analysis currently seeking a full-time opportunity in telecommunications or software engineering.

Education

Johns Hopkins University | Baltimore, MD   *May 2018 – May 2020*
Master of Science in Electrical and Computer Engineering: Communications and Networking
➢ Advanced Coursework: Communication Systems Engineering

Georgia Institute of Technology | Atlanta, GA   *August 2014 - December 2017*
Bachelor of Science in Electrical Engineering: Telecommunications and Electrical Energy
➢ Dean's List: Spring 2015, Spring 2016, Spring 2017, Fall 2017
➢ Advanced Coursework: Mobile & Wireless Networks, Wireless Communications, Computer Communications, Power System Analysis & Control, Energy Conversion, Engineering Software Design, Digital Design, Signals & Systems

Work Experience

General Dynamics Mission Systems | Oakton, VA   *January 2018 – Present*
Cyber Software Engineer – CIAP Test Automation
➢ Currently supporting the Cyber Indicators web application through automated regression testing and manual testing.
➢ Fixing newly converted Selenium-Cucumber test scripts by modifying feature files and automation framework.
➢ Prototyping the refactoring of Selenium-Cucumber test scripts and library structure for efficiency and organization.
➢ Writing test cases/SVTPs for newly implemented user stories for export to DOORs.
➢ Troubleshooting failed Jenkins integrated Selenium Java test cases ran on newly implemented integration test servers.
➢ Serving as campus ambassador for Georgia Tech and Virginia Tech.

General Dynamics Mission Systems | Oakton, VA   *May 2017 – August 2017*
Cyber Security Software Engineering Intern – Cyber Indicators Analysis Platform
➢ Collaborated in Agile work environment and utilized GIT in Maven repository within Linux environment.
➢ Created 8 Selenium Java test scripts for CIAP web application to automate application testing process.
➢ Fixed/added XPATHs and common methods in mapped Selenium framework to incorporate in web tests.
➢ Completed regression testing and fixed/enhanced 50% of all 22 web tests for updated UI compatibility.
➢ Documented 133 files with specific process steps and explanations for future usability.
➢ Verified 117 bug fixes on newly refactored UI and provided team with documentations of found errors/analyses.

Dominion | Richmond, VA   *May 2016 - August 2016*
Electric Distribution Engineering Intern – System Protection Engineering
➢ Automated generation of text files & white-sheets from Excel bus & transformer spreadsheets to run tests on ASPEN.
➢ Developed automated net metering user-form to evaluate 110+ inverter compliance requests in system database.
➢ Constructed 10-page documentation on how to conduct net metering requests using automated user-form.
➢ Modified 229 distribution line breaker discrepancies on transmission-line ASPEN model based on ASPEN & SAP.
➢ Analyzed and tested 12 breaker faults on a transmission-line ASPEN model.
➢ Documented 212 discrepancies from 15 line samples on an Impedance Project site and categorized/analyzed errors.

Pepco Holdings, Inc. | Bethesda, MD   *May 2015 - August 2015*
Engineering Intern III NERC – System Operations
➢ Automated the compiling of 480+ transformer data sheets, audited data with EMS-extracted computed values.
➢ Transcribed 40,000+ data points from EMS onto PSS/E 34 for outage contingencies model enhancement.
➢ Discovered PSS/E bug that caused a crash when too many nodes are added to substation - reported to Siemens.

Technical Skills

Languages - English (Native), Mandarin Chinese (Native), Spanish (Basic)

Computer Languages – C, C++, Gherkin, HTML/CSS, Java, JavaScript, MATLAB, MIPS Assembly, Python, TCL, VB, VHDL

Software Tools - Adobe Dreamweaver, ASPEN, GitHub/GitLab, Jenkins, JSXGraph, LabView, LTSpice, Mbed, Micro-Cap SPICE, Microsoft Office, Mathcad, MiSaSiM, NI ELVISmx, Multisim, PhoneGap, Photoshop, PSS/E 34, Quartus II, SAP, Selenium, VMware, Wireshark

Operating Systems – Microsoft Windows (10/8/7/Vista), Linux (Fedora, Ubuntu)

Instrumentation - Function Generator, Logic Analyzer, Multi-meter, NI myDAQ, Oscilloscope

Certification – Certified SAFe 4 Scrum Master

Projects

Distributed Small Cell Technology Using Light Poles | Atlanta, GA   *January 2017 - December 2017*

Multidisciplinary Senior Design Project – Sponsor: Eaton, Advisor: Dr. Mary Ann Weitnauer

➢ Designed 5G small cell prototype with MIMO, mmWave, SigFox/LoRa, LTE, and Wi-Fi coverage on light pole.
➢ Simulated radiation patterns of dipole & patch antennas with MATLAB GUI.
➢ Coordinated with mechanical engineering team to map out mechanical installation of small cell.
➢ Performed wireless link budget analysis and identified antenna and transmitters' power consumptions.

VIP: Intelligent Tutoring System | Atlanta, GA   *January 2016 – December 2016*

Undergraduate Researcher – Advisor: Dr. James McClellan

➢ Resurrected mobile app on PhoneGap and added performance review functionality.
➢ Recreated discrete convolution GUI with HTML/CSS/JavaScript/JSXGraph/GITHUB for Signal Processing students.

Activities & Affiliations

Society of Asian Scientists and Engineers | Atlanta, GA   *January 2017 – May 2018*

➢ Participate in career-building workshops, social events, and outreach events.
➢ Southeast Regional Conference 2017, National Conference & Career Fair 2017, Southeast Regional Conference 2018.

Stem Power Co-Mentor | Lithonia, GA   *Feburary 2017 - December 2017*

➢ Conduct interactive activities, based on a pillar of learning that encourages questioning, making mistakes, and trying new things, with a junior-level Girl Scout troop.

Women in ECE Executive Committee | Atlanta, GA   *August 2016 - December 2017*

➢ Partake in organizing and hosting outreach events and assisted in keeping track of attendance for weekly meetings.