SAMUEL ROSENTHAL

sam-rosenthal.github.io

ser259@cornell.edu • (301) 467- 4646

7212 Millwood Court
Bethesda, MD 20817

209 Eddy Street
Ithaca, NY 14850

EDUCATION

Cornell University, College of Engineering, Ithaca, NY   **Expected May, 2021**
Bachelor of Science, Major: Computer Science**,** Minor: Operations Research   **GPA (Major/Overall): 3.6 / 3.3**

Relevant Coursework: Analysis of Algorithms • Data Structures & Object-Oriented Programming (Java) • Functional Programming (Ocaml) • Computing (Python) • Data-Driven Web Applications • Discrete Structures • Database Systems • Language and Information • Unix Tools and Scripting • Artificial Intelligence • Digital Logic • Embedded Systems • Probability and Statistics • Optimization I, II

EMPLOYMENT

Software Engineer Intern, *Wayfair,* Boston, MA   **Summer 2020**
- Rescinded due to COVID-19

Software Intern, *Transaction Network Services,* Reston, VA (Remote)   **June - August 2020**
- Updated and refactored Selenium automation tests, repairing 650 failures and improving stability of nightly Jenkins builds.
- Wrote dynamic XPaths and adjusted test flows to solve problems caused by live changing website content.
- Implemented Python scripts using regular expressions to parse 6000-line test script into 23 individual scripts files. This enhanced maintainability of tests and enabled quicker debugging of unexpected errors.
- Followed agile development as part of company's Call Guardian (robocaller/spam protection service) team.

Software Development Engineer in Test (SDET) Intern, *Homesite Insurance,* Boston, MA   **June - August 2019**
- Built automated testing framework for home insurance quoting REST API with ReadyAPI/SoapUI.
- Created end-to-end tests to verify quoting in all 46 Homesite insured states by writing Groovy scripts that queried Microsoft SQL Server databases to build JSON HTTP requests.
- Gained domain expertise in home insurance underwriting and Homesite's business model.
- Mastered SoapUI Pro, passing certification at the end of the summer.

Programming Counselor (Java/Logo)**,** *TIC Technology Camp,* Potomac, MD   **Summer 2017 & 2018**

SOFTWARE PROJECTS

java-cssSelector-to-xpath *(https://github.com/sam-rosenthal/java-cssSelector-to-xpath)*   **June 2018 - Present**
- Developed Open Source Software (OSS) written in Java to convert CSS Selectors to XPaths.
- Utilized Java regex and recursion to efficiently validate and parse input CSS Selector Strings.
- Implemented 23 JUnit tests and over 520 individual test cases, achieving 95% code coverage.
- Integrated Travis CI with GitHub to provide a continuous integration pipeline.
- Added conversions for 4 complex pseudo-classes, as requested from users (Summer 2020).

CSS Selector to XPath Converter Website (*https://css-selector-to-xpath.appspot.com*)   **July 2018 - Present**
- Created online tool to transform CSS Selectors to XPaths powered by java-cssSelector-to-xpath OSS and deployed on Google Cloud Platform.
- Built Spring Boot application to provide REST services and render React front-end (Summer 2020).
- Wrote Selenium tests that verified website functionality across Chrome, Firefox, and Edge browsers. Tests validated OSS converter by locating the same web elements using CSS Selectors and XPaths.
- Website receives on average 350 users from 50 countries each month, per Google Analytics.

Personal Website (*https://sam-rosenthal.github.io*)   **July 2018 - Present**
- Developed portfolio website initially with HTML, CSS, Bootstrap, and jQuery.
- Rebuilt and redesigned website with ReactJS, Typescript, and Material-UI. Used lessons learned from first iteration to improve usability (Summer 2020).

SKILLS *(Visit personal website for detailed descriptions and knowledge matrix)*

Programming Languages: Java, Python, JavaScript, Typescript, OCaml, HTML5, CSS3, XPath, SQL, Groovy
Development: Git, GitHub, BitBucket, Jira, Confluence, JUnit, SoapUI, Selenium, Travis CI, Jenkins, Maven, NumPy
Web: React (React Router, JSX, ESLint, NPM), Axios, Bootstrap, Material-UI, jQuery, Spring Boot, D3, Google Cloud Platform, Google Analytics
IDEs: Eclipse, Visual Studio Code, ReadyAPI, Jupyter Notebook, Microsoft SQL Server, Oracle Database
Other: Regular Expressions, Agile, REST, JSON, Linux
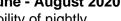
CERTIFICATIONS • PUBLICATIONS

- SoapUI Pro Certified (2019)
- Forster, A.L., Bitter, J.L. **Rosenthal, S.**, Brooks S., and Watson, S.S. "Photofading in cotton fibers dyed using red, yellow, and blue direct dyes during examination with Microspectrophotometry (MSP)." Forensic chemistry 5 (2017): 72–78. PMC.