

Julia Huang

<https://github.com/ShiweiJuliaHuang>

Email : huangs8@rpi.edu

Mobile : +1-401-499-5339

EDUCATION

- **Rensselaer Polytechnic Institute** *Master of Science in Information Technology* Troy, NY
Courses: Software Design & Documentation, Database, Data Analytics, Open Source Software Aug 2019 - May 2021
- **Wheaton College** *Bachelor of Arts in Mathematics and Economics* Norton, MA
Courses: Data Structures, Algorithms, Operating Systems, Linear Algebra, Discrete Math Aug 2011 - May 2015

EXPERIENCE

- **Rensselaer Polytechnic Institute** Troy, NY
Lead TA: Computer Science I Aug 2020 - Present
 - **Head TA:** Supervise as an instructor liaison to 63 graduate TAs and undergraduate mentors to optimize learning opportunities for 600+ students
 - **Discussion Board:** Answer technical and logistical questions through the technical forum on a daily basis for programming assignments and labs to ensure student success
 - **Labs:** Lead weekly lab sessions of 60 students; explain weekly lab requirements, answer student questions, and evaluate students' lab work
 - **Manage Grading:** Oversee the grading procedures by working with TAs; maintain consistent, fair, and reliable grading; make sure grades are published by deadline
- **Grand Circle Corporation** Boston, MA
Web Content Manager Dec 2015 - Nov 2018
 - **Landing Pages:** Designed and oversaw over 200 webpages using HTML, CSS and JavaScript for Grand Circle Corporation on a monthly basis while maintaining the current web content architecture by having daily scrum meetings with team members and weekly marketing meetings with account and product managers
 - **Sitecore CMS:** Created at least one marketing page per week that required logical understanding of the Sitecore content management tree system to ensure impactful web page experience under strict deadlines
 - **Interdepartmental Collaboration:** Worked with the quality assurance team, account management team, and product management team on a daily basis to coordinate daily site requests and participated in major website projects and marketing campaigns
- **Lexomics Data Mining Group** Norton, MA
Co-developer May 2015 - Dec 2015
 - **Software Engineer:** Co-developed Lexomics (funded by NEH Grant), an open-source online suite of tools for analyzing and visualizing experimental results from digitized texts and corpora
 - **Unsupervised Learning:** Used Scikit-learn Python modules to conduct unsupervised learning methods (hierarchical cluster analysis), added similarity scores, and conducted extensive testing with texts from multiple languages
 - **QA Testing:** Tested and analyzed results from large medieval English archival material in both front-end and back-end coding and added the Unicode-based dictionary to test the suite folder for future software testing purposes

PROJECTS

- **Off-Campus Housing Finder:** Project lead for open source web project built with React.js, Node.js, MongoDB created for upper-class university students to find off-campus housing
- **CPU Scheduling Simulator:** Wrote a CPU simulator in C++, using OOP principles and the Round Robin scheduling algorithm which tested how different parameters affect the performance of an operating system and summarized the simulator results in a graphics report
- **Full Stack Web Password Generator:** Constructed a program using PHP on the server side to generate a maximum 9-character password on the web comparable to Apple products password generator; users input the desired number of characters and the program will generate an appropriate password, with the option of adding symbols or numbers as well as letters

PROGRAMMING SKILLS & LANGUAGES

- **Languages:** Python, C++, Java, SQL, PHP, HTML, CSS **Technologies:** React, Flask, Sitecore CMS, \LaTeX