Rebecca Luo

1762 Clifton Rd. MSC 181238 Atlanta, GA 30322 || 225.505.3252

Email: rluo24@emory.edu || LinkedIn: www.linkedin.com/in/rebecca-luo || GitHub: https://github.com/rluo24

EDUCATION

Emory University || (Atlanta, GA)   **Spring 2022**
Major: Computer Science and Economics || Cumulative GPA: 3.76 /4.00

Baton Rouge Magnet High School || (Baton Rouge, LA)   **Spring 2018**
Cumulative GPA: 4.00/4.00 || National Honor Society, Mu Alpha Theta Chapter President and Louisiana State Corresponding Secretary

SKILLS

Proficient in Java, Python; Basic proficiency in CSS, HTML and JavaScript
Familiar with operating in a Linux and Windows system
Fluent in Mandarin, English, and Latin (translation)

WORK EXPERIENCE

Emory Research Partners Program || (Atlanta, GA)   **Fall 2019 – Present**
Undergraduate Researcher Fellow at the Saikawa Lab
- ❖ Working to deploy air quality data in real-time to people within the Emory community through an informative website
- ❖ Research in progress concerning the health correlations with air-quality fluctuations in the Atlanta area

National Science Foundation Research Program at Southern University || (Baton Rouge, LA)   **Summer 2019**
Consortium for Innovation in Manufacturing and Materials Undergraduate Researcher
- ❖ Designed and analyzed a refractory alloy ReMoNbTaV utilizing the SSOS method using the VASP package and MedeA software
- ❖ Worked with graduate and undergraduate students from various universities to analyze prospective graphene types for immobilizing bacteria on carbon electrodes using a work function Fortran program
- ❖ Used the Louisiana Optical Network Infrastructure and the Nano supercomputer for data transfer and calculations
- ❖ Participated in community outreach activities and was invited to speak to middle/high school students interested in engineering/computer science to encourage underrepresented minorities' participation in the STEM field
- ❖ Presented final findings with a poster at the LSU Summer Research Forum with over 300 attendees

PROJECTS

Emory Internet Crawler   **Spring 2019**
- ❖ Utilized Java and HTML to create a search engine that retrieves a set number of relevant pages related to a user-provided query
- ❖ Used jsoup for accessing and manipulating web pages, particularly extracting links
- ❖ The search engine displays the collected pages ordered by relevance, in this case number of query word appearances in a page

Self-Organizing Datasets   **Spring 2019**
- ❖ Created Java program which self-organizes the data inputted by user to form a visual pattern utilizing physics concepts
- ❖ Data can be read from a file and is itself a simple programming language which eventually displays a pattern designed with the concept of connected nodes

Personal Webpage   **Summer 2019**
- ❖ Used HTML, CSS, and JavaScript to develop a personal website which displays my art portfolios and connect to my other social media sites; project is constantly in progress as I advance my skills in web design
- ❖ Link to webpage: https://rebeccaluo.info/

LEADERSHIP / COMMUNITY INVOLVEMENT

ProgramHers   **Spring 2019 – Present**
Vice-President
- ❖ Strategized advertising methods to publicize the newly founded women-in-tech organization at Emory
- ❖ Organized professional and community development events within the female CS population of over 100 students
- ❖ Coordinated the application process for Emory's Grace Hopper Conference Scholarships with the CS faculty and fellow board members

Girls Who Code   **Fall 2018 – Present**
Vice-President and Academic Instructor
- ❖ Communicated with all parents and volunteers (about 100) through emails concerning club events weekly
- ❖ Equipped around 40 middle and high school girls with technical skills to encourage female participation in technological fields
- ❖ Created lesson plans on Python, CSS, JavaScript, and HTML with Emory volunteers to aid the girls to complete impact projects

RELEVANT COURSEWORK

Intro to Computer Science I & II || Current: Data Structures and Algorithms, Foundations of Computer Science, Intermediate Microeconomics