Rebecca Luo

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EDUCATION

Emory University || (Atlanta, GA)

Spring 2022

Major: Computer Science and Economics | Cumulative GPA: 3.76 /4.00

Relevant Coursework: Intro to Computer Science I & II, Foundations of Computer Science, Computer Architecture/Machine Level Programming, Intermediate Microeconomics, Principles of Macroeconomics

SKILLS

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

WORK EXPERIENCE

Emory Research Partners Program || (Atlanta, GA)

Fall 2019 - Present

Undergraduate Researcher

Research in progress

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 (The alloy showed high potentials for industrial use due to its high thermal stability, strength, and ductility)
- 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 (LONI) 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 in front of all involved faculty and at the LSU Summer Research Forum with over 300 attendees

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 Instructor
 - Communicated with all parents and volunteers (about 100) through emails concerning club events weekly
 - Equipped around 30 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

PROJECTS

Pinball Game Fall 2018

- Programmed a game where the user can input any number of blocks which disappears when hit by a ball
- Code written in Java with StdDraw to aid in animation of the game and the grid of blocks is implemented through a 2D Boolean array that can be turned off when the program predicts a possible collision of a block with the ball

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/