Melisa R. Zhang

mz2955@columbia.edu | +1 (706) 247 2737 | New York, NY | www.linkedin.com/in/melisarz

EDUCATION

Columbia University Fu Foundation School of Engineering and Applied Sciences

B.S. in Computer Science

Named Scholar: Recipient of the Madam Shiang-chin Liu Scholarship at Columbia University

Relevant Coursework: Calculus I, Physics 1401, General Chemistry, Art of Engineering, Data Structures in Java, Calculus II, Physics 1402, University Writing in American Studies, Intro to Computing for Engineers and Applied Scientists, Introduction to Databases

May 2022 North Oconee High School Athens, GA

GPA: 4.0/4.0

Relevant Coursework: AP United States Government & Politics, AP Human Geography, AP World History: Modern, AP Physics C: Mechanics, AP Calculus AB, AP Calculus BC, AP United States History, AP Statistics, AP Seminar, AP English & Language Composition, AP Chemistry, AP Macroeconomics, AP Biology, AP Physics C: Electricity & Magnetism, AP Literature & Composition, AP Computer Science A, AP Research, Foundations of Engineering,

Engineering Concepts, Engineering Applications

Top 5%

WORK EXPERIENCE

Cortical Architecture Imaging and Discovery Laboratory, Department of Computer Science,

University of Georgia

Interned under the supervision of Distinguished Research Professor, Dr. Tianming Lu

Read and analyzed research reports

Used **Python** to code simulations

Xie Research Lab, Bio-Imaging Research Center, Department of Chemistry, University of Georgia

May 2020 - August 2021

Synthesized LDL nanoparticles for 7-DHC chemicals in cancer research

Analyzed cancer cell samples using Transmission Electron Microscopy and Atomic Force Microscopy

Young Dawgs Research Program, Intelligent Power Electronics & Electric Machine Laboratory,

Department of Engineering, University of Georgia

Conducted literature reviews

Simulated Single Phase, Three Phase, Half Bridge, and SPWM inverters using Matlab

Ran experiments using an oscillator and circuit boards

Presented to lab and research program board

ACTIVITIES AND SOCIETIES

Women in Computer Science @ Columbia University

Event Coordinator

Help plan and coordinate university CS events like Divhacks

Jumpstarting Aspiring Developers & Entrepreneurs Internship

Participant

Selected as 1 of top 20 undergrads to partake in an immersion program with leading tech companies

Had discussions with executives, venture capital investors, product managers, and software engineers

Learned Web Development through HTML, CSS, JavaScript, and GitHub

Launched my own website

Girls in Tech NYC Hackathon 2022

Participant

Built website prototype that connects formerly incarcerated persons to reliable housing

Attended workshops on UX Engineering, Database Engineering, and PM

Technology Student Association - Engineering Club

President and Chapter Ambassador

Planned and led club meetings and events

Planned and implemented intraschool fundraisers with neighboring schools in association with Synovus Bank

Competed in regional and state competitions: 4th in State Promotional Design, 10th in State Essays in Tech

Robotics Club August 2018 - May 2022

Team Captain

Programmed, built, and managed the creation of a robot for competition

Delegated tasks and facilitated communication and cooperation between team members

Served as public head of team for competitions and meets

Georgia Secretary of State Student Ambassadors Program

Board Member

Part of a nine-member team to encourage voter registration amongst high school students via political events

Planned events for competition

ACCOMPLISHMENTS

PATENT (provisional): Melisa R. Zhang, "Disposable and Reusable Disinfectant-impregnated Gloves to Combat COVID-19", US 63/149,484

Recipient of the Madam Shiang-chin Liu Scholarship: Established

by Dr. Mingdong Zhang and Dr. Ling Huang P'21 to provide scholarship support to undergraduate students enrolled at SEAS.

SKILLS

Languages/Applications: <u>Iava, Python, Matlab, Javascript, CSS</u>, Arduino.IDE, Vue/Nuxt, Node.js

- Other: Mandarin, Spanish, MS Excel and PPT, Simulink
- Highly organized, detail oriented, efficient
- Proactive, great work ethic, motivated
- Teamwork, leadership, communication

January 2020 - May 2022

May 2019 - August 2019

Expected May 2026 New York, NY

October 2022 - Present

November 2022 - January 2023

October 2022

August 2018 - May 2022

August 2021 - May 2022