

# ALEXANDRA HSUEH

## Computer Science and Mathematics Dual Major

@ alexandrahsueh@gmail.com

732-524-8054

Morganville, NJ 07751

in linkedin.com/in/alexandra-hsueh/

github.com/hsueha/

## EDUCATION

**Rensselaer Polytechnic Institute (RPI), Troy, NY**

Expected Graduation Year: 2022

B.S. Computer Science/Mathematics

GPA: 3.81

**Skills:** C++, C, Java, Python, LaTeX, VBA, MIPS, Microsoft Office

### Courses in Progress:

– Programming Languages, Database Systems, Distributed Systems and Algorithms, Introduction to Topology

### Courses Taken:

– Computer Science: Data Structures, Foundation of Computer Science, Computer Organizations, Introduction to Algorithms, Principles of Software, Introduction to Artificial Intelligence, Design and Analysis of Algorithms, Operating Systems

– Mathematics: Multivariable Calculus and Matrix Algebra, Introduction to Differential Equations, Foundation of Analysis, Numerical Computing, Linear Algebra, Introduction to Complex Variables

## WORK EXPERIENCE

**Global Technology Analyst Intern** – Bank of America – Jersey City, NJ

June 2019 – August 2019

– Collaborated with the GMOT Risk and Control team for Global Banking and Markets Technology

– Self-taught VBA in order to enhance their automation of reporting and did deep-dive analysis of technical change

– Built the foundation of the team's new space for providing reference guides, role descriptions and answers to frequently asked questions

**Undergraduate Teaching Assistant for Introduction to Logic** – Rensselaer Polytechnic Institute – Troy, NY

May 2020 – Present

– Held office hours and helped with marking homeworks and tests

**Undergraduate Teaching Assistant for Introduction to Algorithms** – Rensselaer Polytechnic Institute – Troy, NY

August 2020 – Present

– Held office hours and helped with marking homeworks and tests

## PROJECTS

**Automated Logic Processor and Creation Application** – Rensselaer Center for Open Source

September 2019 – Present

– Developed code to construct/check logic statements/reasoning using Python and Kivy for the GUI and C++ for the logic engine

**K-Map Generator** – Intermediate Logic

January 2020 – April 2020

– Developed a Python program that teaches students to use K-Maps to simplify boolean expressions and verifies if the students have the optimal solution

## AWARDS

**Congressional Gold Medal Award** – Washington D.C.

June 2018

– Completed over 600 volunteer hours and achieved goals in personal development and athletic skill over the course of three years

## ORGANIZATIONS/CLUBS

**HackRPI**

November 2018 – Present

President, Executive Director of the Treasury, Freshman Representative

– Organized the three Spring 2019, Fall 2019, and Fall 2020 hackathons

– Managed the Sponsorship and Finance teams as well as four other teams to host the hackathons

**ACM-W (Association for Computing Machinery Committee on Women in Computing)**

September 2018 - Present

Mentorship Program Chair, Mentor

– Stepped up to organize the next round of the mentorship program to help freshmen adjust to campus

**AWM (RPI's Chapter of Association for Women in Mathematics)**

September 2018 – Present

President, Treasurer

– Organized events and funding in order to provide women in mathematics an inclusive environment to interact

**Red & White**

February 2019 - Present

Executive Director for Graduate Success

– Helped connect the RPI community and alumni connections through tours and campus events

**Upsilon Pi Epsilon Computer Science Honor Society**

December 2019 - Present

Programming Contest/Sponsorship Chair

– Reached out to past sponsors and new potential sponsors in order to provide funding to the organization

**WMP – (Women's Mentoring Program)**

August 2018 - Present

– Mentored two incoming freshmen who share similar majors and prepared them for both campus and academic life