# Jennifer Seibert

Holbrook, NY • (631) 523-2108 • jseiber1@binghamton.edu • https://www.linkedin.com/in/jennifer-seibert/

#### **EDUCATION**

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science

Bachelor of Science in Computer Science

Expected May 2023

Overall GPA: 3.82 / 4.00 | Dean's List: Fall 2019 - Present

**Relevant Coursework:** Architecture from a Programmer's Perspective, Data Structures & Algorithms, Programming with Objects & Data Structures, Programming and Hardware Fundamentals, Image & Acoustic Signals Analysis (Machine Learning)

#### **TECHNICAL SKILLS AND COURSES**

Languages: C++, C, Python, Java, Objective-C, HTML/CSS

Software and OS: Visual Studio Code, XCode, Eclipse, Emacs, Git, IDLE, macOS, LaTeX

#### RESEARCH EXPERIENCE

Carnegie Mellon University, Research Experience for Undergraduates | Intern | Pittsburgh, PA May 2021 - August 2021

- Implemented a Prime + Probe cache attack in the last-level cache using C++ to attack applications using AES encryption
- Researched how applications can detect cache attacks based on eviction callback functions run on an engine
- Presented research to NSF-REU sponsors through a PowerPoint and to peers through a poster talk

Binghamton University, Department of Computer Science | Researcher | Binghamton, NY March 2020 - December 2020

- Devised methods for an open-source C-wrapper library to generate diagrams in Adobe's PostScript language
- Reviewed and edited research papers pertaining to graph partitioning and VLSI design prior to submitting to conferences
- Co-authored <u>"A PostScript Toolkit for Electronic Design"</u> with Professor Patrick Madden in Workshop on Open-Source EDA Technology Conference

Binghamton University, First-Year Research Immersion | Researcher | Binghamton, NY August 2019 - December 2020

- Developed a program using neural network models in Python to generate human motion synthesis of dance
- Engaged with research advisors and teammates to complete and delegate assignments and research areas
- Wrote individual and team technical reports and research proposals using LaTeX after extensive literature review on related work and previous models
  - Presented poster talks on the research at annual poster session to peers and faculty (December 2019, December 2020)

# PROJECT EXPERIENCE

Binghamton University, CPU Simulator | Programmer | Binghamton, NY

May 2020

- Implemented Pippin CPU Simulator in Java to take in and assemble an assembly file while checking for errors and display memory content in GUI
  - Managed project using GitHub, met all specifications using JUnit testing, and documented code using JavaDocs

#### LEADERSHIP AND OTHER EXPERIENCE

Girls Who Code at Binghamton | Binghamton, NY President

May 2021 - Present

- Direct a staff of ten Executive Board members to organize marketing, curriculum development, and administrative responsibilities to host semesterly ten-week coding classes for over fifty middle and high school girls
  - Communicate with University and external officials to maximize student experience and community outreach efforts

## **Lead Python Teaching Instructor**

September 2020 - May 2021

- Created presentations and coding activities for weekly Python lessons being taught to twenty high school girls via Zoom
- Facilitated meetings with teaching instructors to ensure quality teaching and keep students engaged over an online platform

### Java Teaching Instructor

January 2020 - August 2020

- Taught and mentored six high school girls to learn how to code in Java by teaching lessons and offering individual help
- Coordinated a transition to a virtual Fall 2020 program via internet marketing techniques and hosting virtual trial classes

# Alpha Omega Epsilon, Psi Chapter | Secretary | Binghamton, NY

May 2020 - Present

- Update members with meeting minutes and reminders about important dates and information

University Scholars Program | Student Mentor | Binghamton, NY

May 2020 - May 2021

- Mentored eight first-year students through virtual programming and communication to devise a fulfilling first-year experience

#### Binghamton University | Course Assistant | Binghamton, NY

August 2020 - December 2020

- Oversaw labs for an Introduction to Programming in Python course by answering student questions and holding office hours
- Graded the labs and assignments of 24 students while providing insightful feedback on how to improve