

Veronica Pimenova

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Education

Carnegie Mellon University, Pittsburgh, PA

Expected in May 2025

Bachelor of Science, **Information Systems and Human Computer Interaction**

Selected Coursework: Imperative Computation, Reasoning with Data, Calculus I & II, Fundamentals of Programming & Computer Science, Empirical Research Methods, Human Centered Software, Database Design & Development

Skills

Languages: Java, Python, C/C#, HTML, CSS, JavaScript, SQL

Spoken Languages: English, Russian

Research Experience

Lead Research Assistant, Carnegie Mellon Software and Societal Systems

September 2022 - Present

- Designed, developed, and tested an online accessible learning platform to teach basic programming skills to children with various types of neurodiversities (specifically focusing on ADHD and Autism).
- Conducted user research and usability testing with 25 potential users. Analyzed user experiences through personas, workflows, scenarios, and information architecture breakdowns. Developed wireframes and prototypes for design and tech reviews while defining documentation and usage guidelines for improved accessibility.
- Guided a sub-team of 3 students and presented updates at weekly VariAbility lab meetings (~20 students).
- Utilized various ML models for segment and word detection of collected pedagogical videos via Scratch.

Student Researcher, Carnegie Mellon Decision Sciences Department

September 2023 - December 2023

- Lead a team of 6 undergraduate students in creating a research study which focuses on determining the correlation between grade fairness and student quality of life.
- Held bi-weekly meetings and created a final poster which was presented to 100+ undergraduate students.
- Completed a literature review of the World Happiness Report and other sources that were put into a Qualtrics survey with 50+ responses over a two week period.

Projects and Publications

- **“Neuroinclusive Documentation”** - work in progress with Carnegie Mellon University’s VariAbility Lab in creating an AI website that allows children with various disabilities to learn programming skills (September 2022-present). Published and presented at 2023 Carnegie Mellon Meeting of the Minds.
- **“Applying Computer Vision and Artificial Intelligence in Analysis of Sports Motion”** - this project uses Temporal Action Segmentation and Computer Vision via Python libraries to create a program that scores a figure skater’s Grade of Execution (November 2021-May 2022). Published in 2022 PRSEF Proceedings.
- **“Optimized Design for Modern Fluorescent Paint with MINITAB through Six Sigma”** - Used Six Sigma to create a more optimal fluorescent paint (September 2018-May 2019). Published in 2019 PRSEF Proceedings.

Technical Experience

Machine Learning Intern, Velo AI

May 2023 - August 2023

- Searched through and sorted thousands of collected video data sets to use for social media promotion, with a goal of increasing exposure before the official product launch in October 2023.
- Used ML models and various Python libraries to load object lists and generate animation overlays on the selected data sets. Published the edited data onto LinkedIn to gain a 75% increase in visibility across the summer.
- Conducted field research and met with investors to do demo testing in the Pittsburgh and Silicon Valley areas and represented Velo AI while meeting with accessibility professionals at local tech companies such as Google, Inc.

Software Engineering Intern, Argo AI

May 2022 - August 2022

- Developed an updated IsLaneBlocking classifier (with a random forest model) that detects stopped vehicles that are not in motion for 10 or more seconds.
- Trained the classifier on thousands of collected data sets via collected video recordings and created a new ML pipeline (E2E) to sort the data.
- Used feature importance and model metrics such as F1 and accuracy to compare to the baseline.
- Wrote a Python script to filter log slice video data with specific parameters (such as time or classifier type) and ground truth, which improved efficiency of data collection and organization.

User Experience Designer, Etsy - Smoreslimee

October 2017 - March 2020

- Advertised and developed new ideas for various kinds of products to put on the SMORESLLIMEE website (an online business for kid's craft products).
- Created content and tested different product structures and strategies that would result in the best user experience, which gained almost 1,000,000 views on advertised items with an average of a 4/5 star customer experience.

Volunteer Experience

User Interface & User Experience Team, Carnegie Mellon Scotty Labs

September 2022 - May 2023

- Attended weekly design team meetings and workshops to learn various skills in Figma from upperclassmen.
- Contributed to several design projects including Carnegie Mellon's biggest hackathon, Tartanhacks.

Java and Python Instructor, Steel City Codes

June 2021 - August 2021

- Organized and led a summer camp to teach Java through video game storytelling for underrepresented students of color and students on the Autistic spectrum.
- Taught 20 students over the course of two weeks of instruction (6 hours a day) with planned instructional material.

Leadership

Lead Mentor/Ambassador, Women in Information Systems

August 2023 - Present

- Organized mentorship opportunities for female students (including local high schoolers), fostering a supportive and collaborative community. Created informational workshop events and hosted 1:1 meetings with students.

Diversity, Equity, and Inclusion Chair, Carnegie Mellon Delta Delta Delta

August 2023 - December 2023

- Advocated for inclusivity by holding several meetings for 70+ members and promoted DEI-related events.
- Implemented strategies to allow for an open and welcoming environment for members with diverse backgrounds.

Website Developer, BoardDefense.io

November 2022 - May 2023

- Fully designed & implemented an end-to-end web and tablet-based quiz site for a local cybersecurity startup, aimed at streamlining board member's security knowledge with HTML, CSS, and SQL to make an intuitive site.
- Ran weekly team meetings with two cybersecurity experts (Senior VP of Cybersecurity & IT at Motional, Inc. and the Founder of Allegheny Digital) and a Psychology PhD student to discuss status updates & concerns.

Activities

- Lead Presenter & Coordinator, **Ronald McDonald House Charities** October 2021 - May 2022
- Secretary, National Honor Society, Seneca Valley Chapter September 2021 - May 2022
- Website Developer, Lead Programmer, Community Outreach, **SV Raider Robotics** September 2020 - May 2022
- **President, Seneca Valley Women in Engineering Club** September 2020 - May 2022
- President and Co-Founder, **Slavic Language and Visibility Club** September 2020 - May 2022
- Junior Presenter, Sigma Xi Society September 2020 - November 2020

Selected Technical Awards

- **Octillo Women's Cybersecurity Award**, 2023.
- **Raytheon Intelligence & Space Award** in Cybersecurity, 2022.
- Honorable Mention, National Center for **Women & Information Technology Award** (NCWIT) 2021.
- Ranked 3rd and 12th in Pennsylvania, **Air Force Association CyberPatriot XIV and XIII** Competitions.
- Science National Honor Society (SV Chapter) STEM Award for Advocacy of Women in Science, 2021.
- **Winner**, NCWIT for Aspirations in Computing (Pennsylvania), 2021.
- Rising Star, NCWIT for Aspirations in Computing (Pennsylvania), 2020.

Selected Non-Technical Awards

- **Coca Cola Scholars** Foundation Semifinalist, 2022.
- Finalist, **National Security Language Initiative for Youth for study in Russia**, U.S. Department of State, 2021.
- ACTR Olympiada of Spoken Russian for Western Pennsylvania Gold Medalist, 2019.
- Senior Free Skate and **United States Figure Skating Gold Medalist** Moves in the Field and Freestyle, 2019.
- ACL/NJCL **National Latin Exam**, Outstanding Achievement in the Introduction to Latin Exam, 2018.
- Academic Games League of America Propaganda National Tournament 4th Place, 2018, 3rd Place 2017.