# Anna Gerchanovsky *Computer Science Ph.D. Student*

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## Education

**Ph.D. Computer Science** *(Expected) August 2024 –*
Duke University *Durham, NC*

**M.S. Electrical and Computer Engineering** *August 2023 – May 2024*
Carnegie Mellon University *Pittsburgh, PA* 4.00/4.00

**B.S. Electrical and Computer Engineering, Minor in Computer Science** *August 2019 – May 2023*
Carnegie Mellon University *Pittsburgh, PA* 3.66/4.00

*University Honors*

## Research

**Research Intern** Carnegie Mellon Cylab, *Pittsburgh, PA* *May 2023 – Present*

• Conduct literature reviews and analyze success of and recreate results of existing work in the field, while working on projects in adversarial machine learning for image classifiers and adversarial attacks inducing bias in large language models.
• Develop adversarial models and implement adversarial algorithms and evaluate performance of a variety of models.
• Present weekly progress reports to a group of professors, post doctoral fellows, and PhD students summarizing my work, analyzing results, and proposing next steps.

## Work Experience

**Software Engineering Intern** Meta, *Seattle, WA* *May 2022 – August 2022*

• Established error and status logging for the general machine learning model processing team with the goal of analyzing project performance and progress.
• Wrote and tested object oriented code in Python, and improved test coverage for machine learning pipelines.

**Automation Engineering Intern** Nucor Tubular Products, *Louisville, KY* *May 2021 – August 2021*

• Integrated IBA suite for monitoring PLCs controlling plant performance and led training sessions for team members to build familiarity with the new IBA system.
• Executed daily report design and generation projects for several areas of the plant in order to better analyze and improve on past performance.

## Teaching and Mentorship

**Introduction to Computer Security Teaching Assistant** *January 2022 – May 2024*
Carnegie Mellon Department of Electrical and Computer Engineering Pittsburgh, PA

*Received Departmental Outstanding Teaching Assistant Award*

Head TA Duties (as of August 2023)

• Oversaw a team of 7 teaching assistants by distributing responsibilities and tasks.
• Held weekly meetings to manage task progress, establish responsibilities, and familiarize staff with upcoming material.
• Managed on boarding for new and returning course staff
• Handled communication between course staff or students and instructors.

General TA Duties

• Set up and graded homework assignments on software security, cryptography, web security, and human factors in security.
• Held 2 hours of office hours weekly to assist students with assignments and course material, as well as monitored course forum and answer student questions - covering topics like assembly, buffer overflows, XSS attacks, and SQL injections.
• Led recitations to promote student understanding of course material via hands on activities.
• Developed material for and lead student bootcamps on cryptography.
• Proctored and grade three exams per semester.

**Peer Advisor** *Pittsburgh, PA*
Carnegie Mellon University Department of Electrical and Computer Engineering August 2023 – Present

• Advised undergraduate students in the Electrical and Computer Engineering Department and referred students to appropriate resources when necessary.
• Hosted individual office hours and group advising sessions.

**Model Coordinator** Lunar Gala, *Pittsburgh, PA* *August 2023 – Present*

• Facilitated the recruitment and audition process of the modeling department of the Lunar Gala student fashion show.
• Provided feedback and support during semi-weekly team practice and organize and design practice activities and choreography.

**Tutor** Young Tutoring, *Remote* *August 2020 – December 2023*

• Designed and taught one on one lesson plans for students in a variety of subjects including CS, math, and English.

## Skills

**Programming Languages** Python, C, C++, C0, Swift, SML, JavaScript, CSS
**Software** Xcode, SystemVerilog, Matlab, Iba Suite