ELAINE ZHU

zhu.lae@northeastern.edu https://elaine.foo Boston, MA

EDUCATION

Northeastern University **Sep 2022 - May 2026**

Bachelor of Science in Cybersecurity and Criminal Justice *Boston, MA*

- Honors: University Honors Program, Dean's List (all semesters), Magna Cum Laude
- Relevant courses: Object Oriented Design, Systems Security, Computer Networks, Programming Languages

PUBLICATIONS

- Longpre, S.*, **Zhu, E.***, Ezell, C.*, Ghosh, A.*, et al. (2026). *FLARE-AI: Flaw Reporting for AI.* International Conference on Machine Learning 2026. https://arxiv.org/abs/2606.31567
- **Zhu, E.**, Coombes, C., Teja, S., & Patterson, D. (2025). *FEEDBOT: Formative Design Feedback on Programming Assignments*. In Proceedings of the 30th ACM Conference on Innovation and Technology in Computer Science Education, 1, 576–582. https://doi.org/10.1145/3724363.3729063
- Khezresmaeilzadeh, T., **Zhu, E.**, Grieco, K., Dubois, D. J., Psounis, K., & Choffnes, D. (2025). *Echoes of Privacy: Uncovering the Profiling Practices of Voice Assistants*. Proceedings on Privacy Enhancing Technologies Symposium, 2, 71–87. https://doi.org/10.56553/popets-2025-0050

* = equal contribution

SELECTED EXPERIENCE

PricewaterhouseCoopers **Jul 2025 - Dec 2025; Aug 2026 - Present**

Cybersecurity Consultant *Boston, MA*

- Conducted due diligence reviews of third-party vendors, analyzing documentation and controls to ensure alignment with regulatory and industry standards.
- Designed intelligent threat hunting agents in Python leveraging machine learning and natural language processing frameworks.

Cybersecurity and Privacy Institute at Northeastern University **Jan 2023 - Present**

Research Assistant *Boston, MA*

- Co-authored publications investigating voice assistants' profiling practices and custom pedagogical tools efficacy.
- Programmed Python scripts to automate processes such as web scraping, improving efficiency by up to 90%.
- Investigating surveillance pricing and price discrimination of food delivery platforms.

Northeastern University **Aug 2024 - Apr 2025; Jan 2026 - Apr 2026**

Teaching Assistant, Content Team Lead *Boston, MA*

- Optimized Racket-based autograder for CS2500, enhancing grading efficiency.
- Collaborated with professor to develop assignments for 500+ students, ensuring alignment with course objectives.
- Conducted lab sessions and office hours, providing technical guidance in Racket programming.

Fidelity Investments **Jun 2024 - Aug 2024**

Cybersecurity Intern *Boston, MA*

- Mapped technologies for Zero Trust Architecture initiative, improving security alignment with ZTA principles.
- Created technical documentation and ML security code using Python libraries including IsolationForest.

PROJECTS

AI Flaw Reporting Form **May 2025 - Present**

- Built an AI flaw reporting system using Next JS with dynamic form logic and automated routing to stakeholders.
- Programmed schema validation pipeline using Pydantic models and pyld JSON-LD processing with automated semantic data transformation and cross-format serialization.

SKILLS

Languages: Python, Java, Racket, SQL, HTML, CSS, Bash, Pyret, JavaScript, TypeScript, C

Skills and tools: Wireshark, Ghidra, Burp Suite, Selenium, Linux, penetration testing, reverse engineering