

ANDREW CASCIO

CONTACT INFORMATION	Department of Computer Science Duke University	ac940@duke.edu casciand.github.io
RESEARCH INTERESTS	programming languages, language-based security, differential privacy	
EDUCATION	Duke University M.S. in Computer Science - 4.00 Committee: Danfeng Zhang (advisor), Mike Reiter, Jun Yang	2024 - 2026
	Vanderbilt University B.S. (cum laude) in Computer Science (Honors), Mathematics - 3.88	2020 - 2024
TEACHING EXPERIENCE	5 academic terms of teaching undergrad and grad students at Vanderbilt and Duke. Held regular office hours, created & graded content, and occasionally taught lecture.	
	Duke University Graduate Teaching Assistant COMPSCI 587: Language-Based Security (13 students) COMPSCI 230: Discrete Math for Computer Science (66 students)	Fall 2025 Fall 2024
	Vanderbilt University Undergraduate Teaching Assistant CS 3251: Intermediate Software Design CS 2201: Program Design and Data Structures CS 1100: Applied Programming and Problem Solving with Python	Fall 2022 Spring 2022 Fall 2021
RESEARCH EXPERIENCE	Duke University Graduate Student Researcher (<i>Supervisor: Prof. Danfeng Zhang</i>)	Spring 2025 - Present
	• Designed and proved the correctness of a differentially private database query processing system that achieves state-of-the-art utility. (NSF Award #2317232)	
	Vanderbilt University Undergraduate Student Researcher (<i>Supervisor: Dr. Daniel Balasubramanian</i>)	Fall 2022
	• Assisted in verifying the compatibility of security enhancements to legacy software systems. (DARPA V-SPELLS Program)	
INDUSTRY EXPERIENCE	Amazon Software Development Engineer Intern (<i>New York, NY</i>)	Summer 2024
	• Led redesign of AWS EMR Security Configurations by designing new data model, enabling IAM access controls, improving API outputs, and migrating configurations into new storage service to align with evolving architecture.	
	• Reduced number of API calls when listing EMR Security Configurations in AWS Console from $O(n)$ to $O(1)$ in number of configurations.	
	Software Development Engineer Intern (<i>Sunnyvale, CA</i>)	Summer 2023
	• Expedited time to Alexa Voice Service certification and eliminated physical device dependencies for 8+ internal development teams by engineering lab-less self-testing feature.	
	Ford Motor Software Engineer Intern (<i>Dearborn, MI</i>)	Summer 2022
	• Led team of 6 to develop general-purpose survey tool that replaced existing solution.	
AWARDS	ACM SIGPLAN PLMW @ ICFP/SPLASH Scholarship	2025