

CONTACT	Georgia Institute of Technology Sacramento, California, United States	E-mail: <a href="mailto:ethan.villalovoz@gatech.edu">ethan.villalovoz@gatech.edu</a> Links: <a href="#">Website</a> , <a href="#">LinkedIn</a> , <a href="#">Google Scholar</a>
EDUCATION	<b>Georgia Institute of Technology</b> <i>M.S. in Computer Science</i> , Computational Perception and Robotics	<b>Jan 2026 - Dec 2027</b> GPA: 4.0/4.0
	<b>Washington State University</b> <i>B.S. in Computer Science</i> , Minor in Mathematics Senior Design Project: <a href="#">Retrieval-Augmented Generation Using Knowledge Graph and Vector Search</a>	<b>Aug 2021 - May 2025</b> GPA: 3.94/4.0
EXPERIENCE	<b>Microsoft</b> , Redmond, Washington, United States <i>Software Engineer Intern</i> , Advised by TBA Commerce and Ecosystems.	<b>May 2026 - Jul 2026</b>
	<b>Washington State University</b> , Pullman, Washington, United States <i>Undergraduate Research Assistant</i> , Advised by <a href="#">Janardhan Rao (Jana) Doppa</a> Developed and evaluated a Bayesian optimization framework for prompt-based LLM code generation, demonstrating sample-efficient improvements in functional correctness on the HumanEval+ benchmark.	<b>Jan 2024 - May 2025</b>
	<b>Carnegie Mellon University</b> , Pittsburgh, Pennsylvania, United States <i>Robotics Institute Summer Scholar</i> , Advised by <a href="#">Henny Admoni</a> Developed a hierarchical reward learning framework with Bayesian inference and interactive clarification dialogues, enhancing robot adaptability and task accuracy in human-robot collaboration research.	<b>Jun 2024 - Aug 2024</b>
	<b>Google</b> , Sunnyvale, California, United States <i>Software Engineering Intern (STEP)</i> , Advised by <a href="#">Arun Tej Chennadi</a> , <a href="#">Paul Valdez</a> Developed scalable C++ and SQL analytics pipelines and interactive dashboards that optimized internal data workflows, reduced runtime by 66%, and enhanced real-time decision-making across engineering teams.	<b>May 2023 - Aug 2023</b>
	<b>Oregon State University</b> , Corvallis, Oregon, United States <i>NSF REU Fellow</i> , Advised by <a href="#">Heather Knight</a> Designed and implemented geometric motion primitives and interactive deployment tools enabling expressive multi-robot behaviors for human-robot interaction research.	<b>Jun 2022 - Aug 2022</b>
AWARDS & HONORS	<b>CS Research Mentorship Program Scholar</b> , <a href="#">Google Research</a> Accepted to a three-month program that matches students with Google mentors and peers to support their pursuit of computer science research pathways.	2023
	<b>Generation Google Scholarship</b> Awarded based on the strength of each candidate's commitment to diversity, equity, and inclusion, demonstrated leadership, and academic performance.	2023
	<b>NIH MARC Scholar - National Institutes of Health (T34)</b> NIH-funded opportunity for undergraduate students from underrepresented backgrounds to embark on a two-year scientific research program, leadership development, and graduate-school preparation.	2023 - 2025
PRE-PRINTS	[P1] <b>An Exploratory Study of Bayesian Prompt Optimization for Test-Driven Code Generation with Large Language Models.</b> S. Tomar, A. Deshwal, <a href="#">E. Villalovoz</a> , M. Fazzini, H. Cai, J.R. Doppa. <i>arXiv</i> , 2025.	

CONFERENCE  
PUBLICATIONS

[C1] **Social Triangles and Aggressive Lines: Multi-Robot Formations Impact Navigation and Approach.**

A. Bacula, [E. Villalovoz](#), D. Flynn, A. Mehta, H. Knight.

*International Conference on Intelligent Robots and Systems (IROS), 2023.*

TEACHING

**CPT\_S 315: Introduction to Data Mining**

*Undergraduate Teaching Assistant, Washington State University*

Spring 2025

**CPT\_S 350: Design and Analysis of Algorithms**

*Undergraduate Teaching Assistant, Washington State University*

Fall 2024

**CPT\_S 355: Programming Language Design**

*Undergraduate Teaching Assistant, Washington State University*

Fall 2023

**CPT\_S 121: Program Design and Development C/C++**

*Undergraduate Teaching Assistant, Washington State University*

Fall 2022

OUTREACH

**WSU MARC & MIRA Program** (Invited Talk)

2025

Invited to present to undergraduate researchers about the graduate school application process.  
Shared personal experiences and actionable advice for pursuing research opportunities.

**WSU VCEA** (College Ambassador)

2022 - 2024

Represented and connected Voiland College with industry, alumni, and prospective students, sharing unique experiences and perspectives to promote the college's mission and transformative impact.

**CMU RISS RoboLaunch** (Website Coordinator)

2024

An initiative to explore the world of robotics through a series of talks and interactive workshops.  
Responsible for updating the website to ensure accessibility and provide up-to-date information.