

Chase M. Enlowsmith

CONTACT INFORMATION	<i>Phone:</i> 415 - 304 - 4967 <i>Email:</i> cenlowsmith@gmail.com <i>LinkedIn:</i> linkedin.com/in/chase-enlowsmith/	
EDUCATION	The University of Texas at Austin , Austin, Texas Bachelor of Science in Physics & Astronomy <ul style="list-style-type: none">GPA 3.91Relevant Coursework: Quantum Mechanics, Electrodynamics, Thermodynamics, Relativity, Astrophysics, Cosmology	Dec 2025
HONORS AND AWARDS	Phi Beta Kappa , Alpha of Texas chapter University Honors , University of Texas at Austin Lightning Talk Competition - 2nd Place , Applied Research Labs 2025 Honors Scholar Lightning Talk: <i>"Machine Learning on Sound Speed Profiles to Characterize Ocean Variability"</i>	Feb 2025 – Present May 2023 – Present Jul 2025
PROFESSIONAL RESEARCH EXPERIENCE	Applied Research Lab , Austin, Texas Honors Scholar Intern <ul style="list-style-type: none">Engineered a machine learning pipeline to geographically cluster underwater acoustic data across basin scales.Characterized ocean variability on decadal timescales, providing valuable insight into long-term ocean patterns.Created a bespoke data-reduction methodology to optimize pipeline accuracy and efficiency beyond industry standards.Innovating new machine learning approaches to predict acoustic features for tactical oceanography applications.Authoring a manuscript to be published in peer-reviewed journals. Center for Gravitational Physics , Austin, Texas Undergraduate Researcher <ul style="list-style-type: none">Designed and developed a data analysis pipeline to calculate galaxy redshifts from the Hobby-Eberly Telescope (HET) VIRUS-P Parallel Survey (VIPS) utilizing the Redrock API.Provided the extracted redshifts from HET spectra for current comparative studies with gravitational wave-derived distance measurements to further investigate the Hubble tension.Investigated how cosmological assumptions, the number of lines of sight, galaxy catalogue sparseness, and EM-signal availability all affect the Hubble constant posterior.	Jun 2025 – Present Oct 2024 – Aug 2025
RESEARCH PROJECTS	CMBverse , Austin, Texas <ul style="list-style-type: none">Simulated Cosmic Microwave Background (CMB) power spectra utilizing the Cosmic Linear Anisotropy Solving System (CLASS) and graphically analyzed the impact of Lambda Cold Dark Matter (LCDM) model parameters.Designed and published a website to display interactive graphs, improving accessibility for academic audiences within the Physics and Astronomy departments at the University of Texas at Austin and beyond.	Jun 2024 – Jul 2025

LEADERSHIP AND COMMUNITY INVOLVEMENT	Theta Chi Fraternity , Austin, Texas	
	Scholarship Chair	Dec 2023 – Dec 2024
	<ul style="list-style-type: none"> • Connected 40+ members with applicable scholarship opportunities, career events, and academic opportunities. • Oversaw academic performance and provided one-on-one career and academic assistance. 	
	Recruitment Captain	Dec 2023 - Dec 2024
	<ul style="list-style-type: none"> • Coordinated recruitment events and outreach to potential new members. 	
	UT MicroFarm , Austin, Texas	Apr 2023 – May 2024
	Volunteer	
	<ul style="list-style-type: none"> • Worked with a team of volunteers to grow plants, manage the upkeep of community garden plots, and compost. • Contributed to producing dozens of pounds of fresh produce donated to the student food bank. 	
TECHNICAL SKILLS	Python, Matlab, Unix, LaTeX, Microsoft Office Suite, Google Suite, Data Analysis, Machine Learning	
LANGUAGES	English (Native), Spanish (Basic)	
PROFESSIONAL REFERENCES	Brittany —, Applied Research Laboratories 10000 Burnet Rd, Austin, TX 78758 <i>Phone:</i> _____ <i>Email:</i> _____	
	Sarah —, Applied Research Laboratories 10000 Burnet Rd, Austin, TX 78758 <i>Phone:</i> _____ <i>Email:</i> _____	
	Gabriele Montefalcone, Ph.D. candidate The University of Texas at Austin 2515 Speedway, Austin, TX 78712 <i>Phone:</i> 609-865-9637 <i>Email:</i> montefalcone@utexas.edu	