

ISHAN F. GHOSH-COUTINHO

CURRICULUM VITAE

University of Washington Department of Astronomy, Seattle
University of Washington School of Drama, Seattle
ifc2002@uw.edu
[ifgc.github.io](https://github.com/ifgc)

5539 25th Ave NE
Seattle, WA 98105
+1 (650) 739-9234

Education	B.S. IN ASTRONOMY, University of Washington (UW)	2024
	B.A. Minor in Drama: Design for Performance, (UW)	2024

Research Experience	UNDERGRADUATE RESEARCHER (UW Massive Star Group & DiRAC Institute)	2020 – Present
	Supervisor: Prof. James R.A. Davenport, Prof. Emily M. Levesque, Dr. Trevor Dorn-Wallenstein (Published: Ghosh-Coutinho et al. 2023a , 2023b ; 2024(expected))	
	30" TELESCOPE OPERATOR (Manashtash Ridge Observatory)	2023 – Present
	Supervisor: Prof. Oliver Fraser (University of Washington)	

Publications & Conference Proceedings	PUBLICATION: PHOTOMETRIC CLASSIFICATION OF EVOLVED MASSIVE STARS: SPECTROSCOPIC VERIFICATION AND VALIDATION	
	Ishan Ghosh-Coutinho , Trevor Dorn-Wallenstein, Emily Levesque, & James Davenport. Research Notes of the American Astronomical Society (November 2023)	
	iPOSTER: PHOTOMETRIC CLASSIFICATION OF EVOLVED MASSIVE STARS: HIGH-RESOLUTION SPECTROSCOPIC VALIDATION	
	Ishan Ghosh-Coutinho , Trevor Dorn-Wallenstein, Emily Levesque, & James Davenport. Bulletin of the American Astronomical Society, (January 2023)	
	iPOSTER: CENSUS OF VARIABILITY OF LUMINOUS BLUE STARS IN GAIA AND ZTF	
	Ishan Ghosh-Coutinho , James Davenport, Emily Levesque, & Trevor Dorn-Wallenstein. Bulletin of the American Astronomical Society, (Accepted January 2024)	

Employment	COMMITTEE CHAIR Associated Students of the University of Washington (ASUW), Senate Committee for Resolution Follow Up, Seattle, WA	October 2023 - Present
-------------------	--	------------------------

Honors & Awards	DEANS LIST (UW)	2023
	INVITED PANELIST, PANEL ON UNDERGRADUATE RESEARCH IN PHYS. AND ASTRO. (UW)	2023
	CHAMBLISS AWARD RUNNER UP, AMERICAN ASTRONOMICAL SOCIETY 241, (AAS)	2023
	ASUW SENATE, SENATOR PARLIAMENTARIAN (UW)	2023
	2022 DiRAC SUMMER RESEARCH PRIZE (DiRAC)	2022

Successful Observing Proposals	Manastash Ridge Observatory 30", Telescopes (12 full nights) - Certified Observer Multiband variable star photometry with Evora. P-I: I. Ghosh-Coutinho	2023 – Present
	APO 0.5-m ARCSAT (8 Half Nights) - Trained Observer Observing variable massive stars identified from ZTF for the Astro 480 course. P-I: S. Tuttle	2023

	APO 3.5-m (3 half nights) - Trained Observer Co-observing massive stars with the echelle spectrograph. P-I: T. Dorn-Wallenstein	2021
Speaking & Conference Experience	Contributed Talk, Mary Gates Undergraduate Research Symposium (Planned) Contributed iPoster, 243rd Meeting of the American Astronomical Society, iPoster Invited Talk, Battle Point Astronomical Association Invited Panelist, Panel on Undergraduate Research in Physics and Astronomy Attendee, Dark Universe Science Center & Institute for Nuclear Theory, Cosmic Intersections Invited Speaker, Pacific Science Center 2023 Eclipse & Meet a Scientist Day Contributed Science Talk, Astro Fest Contributed Structural Talk, Astro Fest Contributed Talk, Mary Gates Undergraduate Research Symposium Contributed iPoster, 241st Meeting of the American Astronomical Society Contributed Talk, Mary Gates Undergraduate Research Symposium Contributed Talk, Mary Gates Undergraduate Research Symposium	2024 2024 2023 2023 2023 2023 2023 2023 2023 2022 2021
Technical Skills	Programming Languages: Python, SQL/ADQL, Java, Other: Unix Shell, IRAF, SAO DS9, LaTeX, PhotUtils, PyMC, Emcee, Adobe Suite, Visual Basic for Applications (VBA) Observing Skills: Proposing, planning, and carrying out optical spectroscopic and photometric observations, Survey & time-domain data retrieval and analysis; machine learning methods (regression & classification); Languages: English, Hindi, Bengali (Spoken), French	
Service & Outreach	UW SEXUAL-ORIENTATION AND GENDER MINORITIES IN ASTRONOMY, FOUNDER & CO-CHAIR (UW) SCHOOL OF DRAMA, ASSISTANT COSTUME DESIGNER (UW) PLANETARIUM PRESENTER, 40+ SHOWS AND EVENTS AND COUNTING (UW) UNDERGRADUATE 'UW ASTRO TO PACIFIC SCIENCE CENTER OUTREACH EVENT' EVENT VOLUNTEER COORDINATOR & UNDERGRADUATE OUTREACH SITE LEAD ASUW SENATOR, CHAIR OF COMMITTEE FOR RESOLUTION FOLLOW UP ASUW SENATOR, COMMITTEE FOR SENATE STEERING ASUW SENATE'S LIASON TO UW OFFICE OF GOVERNMENT RELATIONS, COMMITTEE ON LEGISLATIVE STEERING ASUW SENATOR, MEMBER OF COMMITTEE FOR RESOLUTION FOLLOW UP ASUW PRESIDENT'S LIAISON TO UW TRI-CAMPUS COMMITTEE ON PREPAREDNESS OVERSIGHT FIRST WASHINGTON, PNW DISTRICT CONTROL SYSTEMS ADVISOR FIRST WASHINGTON, PNW DISTRICT ROBOT INSPECTOR ASUW SENATE'S LIAISON TO THE HUSKY UNION BUILDING, BOARD OF REPS. ASUW SENATOR, MEMBER OF ON CAMPUS COMMITTEE VOLUNTEER GAME MASTER, PEN AND PAPER GAMING ASSOCIATION FIRST WASHINGTON, MENTOR TO FRC TEAM 8248 CHAINLYNX	2023 – Present 2023 – Present 2021 – Present 2023 2023 – Present 2023 – Present 2023 – Present 2022 – Present 2022 – Present 2021 –Present 2020 – 2021 2020 – 2021 2020 – Present 2019 – Present
Teaching & Mentoring	MENTOR FOR LINCOLN HIGHSCHOOL CTE PROGRAMS & FIRST ROBOTICS COMPETITION TEAM 8248, CHAINLYNX · Mentored >60 students in skills such as effective design strategies, control systems design and programming. Taught students effective scientific and engineering problem-solving, programming, and troubleshooting. Guided students through the design and design review processes. Guided students through team management, leadership soft skills, curriculum development and peer mentoring. Provided students with networking opportunities.	2019 – Present

DATA SCIENCE FOR HIGHSCHOOLERS WORKSHOP 2022,2023,2024

· Taught students basic use of Jupyter Notebooks, python, github, APIs, to pull data and analysis through various packages such as pandas, scipy, matplotlib, etc. Introduced students to basic data science concepts and bayesian statistics.

JOURNAL CLUB FOR HIGHSCHOOLERS 2022,2023

· Used a combination of **astrobites** and presentations to simplify astronomy and astrophysics paper titles that high school students found interesting and selected. There have been 14 Journal Clubs.

HIGH SCHOOL TUTOR 2020–Present

· Helped >20 high school students work through assignments and concepts related to science, engineering, history, and math.

PEER TUTOR & MENTOR 2022-2023

· Helped 5 students work through assignments and concepts in lower-division physics, astronomy and math coursework and gave advice on how to approach upper-division coursework and research.