

# HARSHITA JINAGA

Email: [harshitajinaga@gmail.com](mailto:harshitajinaga@gmail.com) · Mobile: +1 (858)–396–2128 · Website: <https://harshitajinaga.com/>

## EDUCATION & STANDARDIZED TESTS

- **University of California San Diego** Double Major: Molecular and Cell Biology + Global Health 2024 - Present  
GPA: 4.0 (Provost Honors)
- **American School of Bombay, Mumbai (IB Diploma)** 2021 - 2024
  - HL: Biology, Chemistry, Economics, English A Language and Literature SL: Math AA, Spanish AB
- **SAT:** 1500 (Math-770 English-730) 2022
- **TOEFL:** 113 (Reading - 30 Listening - 26 Speaking - 29 Writing - 28) 2023

## UNIVERSITY OF CALIFORNIA SAN DIEGO

- **Furnari Lab Team Member**, Undergraduate Research Assistant 2025 - Present
  - Designed and developed the Furnari Lab website to highlight research areas, publications, and, improving outreach and accessibility.
  - Conduct research on glioblastoma biology, assisting with projects investigating BRD2-associated vulnerabilities and dependencies.
- **Instructional Assistant**, BICD 100 Genetics with Dr. Pamela Reinagel 2026
  - Lead discussion support, clarify complex concepts, and assist students with problem-solving and exam prep to improve learning.
  - Collaborate with the instructor to facilitate active-learning sessions and student learning in fundamental and applied genetics
- **Triton Research Experiential Scholars Recipient** [Selective Undergraduate Research Program] 2024 - Present  
Research Topic: “How can advanced preprocessing, 3D convolutional architectures, and ensemble learning be integrated to optimize the accuracy and efficiency of AI-based detection of astrocytomas and glioblastomas in T1 MRI scans?”
  - Utilized a dataset of 4715 native T1 MRI images from 152 patient. Current Model Accuracy and F1 Score: 0.863
  - Selected to present my TRELS-funded research as a poster at three competitive academic conferences, including the Undergraduate Research Conference (URC), MURALS, and the TRELS Research Symposium.
- **Triton Robotics Club**, Team Member 2024 - Present
  - Contribute to the design, prototyping, and optimization of competitive robotics systems as part of a multidisciplinary student team in Triton Robotics.
- **Health Disparities Initiative Club**, Outreach Chair, Board Member 2024 - Present
  - Lead outreach strategy and partnerships for the Health Disparities Initiative, organizing community engagement efforts and expanding program visibility and participation. Organised 2 Food Drives, 1 Blood Drive, and 4 Collaboration Events.
- **Camp Kesem Club**, Development Committee 2024 - Present
  - Support fundraising strategy and donor engagement as part of the Camp Kesem Development Committee, helping sustain programming for children affected by a parent’s cancer.
- **UCSD Pushpanjali Club**, Marketing Chair, Board Member, Indian Classical Dance (Bharatnatyam) 2024 - Present
  - Lead marketing and outreach for the Pushpanjali Indian Classical Dance Team, managing promotions and audience engagement to expand performance visibility and community presence. Controlled all team social media platforms.
- **Ellie’s Garden Club**, Club President 2024 - Present
  - Lead and coordinate Ellie’s Garden Club operations, organizing projects, member engagement, and community outreach to promote sustainable gardening and campus involvement.

## CANCER RESEARCH & OUTREACH

- **H.N. Reliance Hospital, Radiation & Precision Oncology Department, Mumbai, Intern** 2024
  - Gained hands-on experience in contour delineation by learning to accurately identify and outline anatomical structures and tumor boundaries on patient MRI scans. Learned to use medical imaging to differentiate between healthy tissue and pathological regions
  - Understood treatment planning process by learning how to analyze patient scans, and assess tumor characteristics. Gained experience in taking detailed patient medical histories, including documenting symptoms, past treatments, and comorbidities.
- **Triple Negative Breast Cancer Research Paper, JRHS-2023-5201** 2022 - 2023
  - Research Question: “How can we accelerate the identification of biomarker glycoprotein NMB for the early detection of triple-negative breast cancer?” published in *Journal of Research High School*
  - Concluded that GPNMB holds significant promise as an early detection biomarker for TNBC through analysing trials that used immunohistochemistry (IHC) and gene expression analysis to evaluate the glycoproteins levels in breast cancer tissues.
- **Kokilaben Ambani Hospital, Surgical Oncology Department, Dr. Mandar Nadkarni HOD, Mumbai, Intern** 2023
  - Observed a range of oncological surgeries, including mastectomies, breast conservation surgeries, and robotic-assisted tumor resections.
  - Gained insight into surgical techniques, intraoperative decision-making, and postoperative care, reinforcing my interest in oncosurgery.
- **Kokilaben Ambani Chemotherapy Center, Mumbai** 2023
  - Moderated experience-sharing sessions for chemotherapy patients to ease their process of treatment
  - Initiated a *Chemotherapy Patients Support Group Meeting* which will run annually and consists of current and ex-chemotherapy patients coming together to discuss their challenges with an aim to help patients find an outlet for support

## ACADEMIC EXPLORATION OF BIOLOGICAL SCIENCES

### Research

- **IIT Bombay, Biosciences and Bioengineering Lab, Mumbai, Intern under Prof. Prakriti Tayalia** 2022  
*Assisted post-doctorates and doctorates in their research on immunotherapy, tissue regeneration, and spheroid formation*
  - Learned about material based gene delivery, a method to artificially introduce genetic materials through the cell membrane
  - Understood how porous cryogel scaffolds are used for 3D cell cultures through observing chemical cross linking of hydrophilic polymers

- **IIT Guwahati, Nanotechnology Start-Up (MobiLab Primary HealthTech)**, Guwahati, *Intern under Prof. Bandyopadhyay* 2022  
[Overview of Learning IIT Guwahati](#)
  - Performed a series of controlled trials using water, carmoisine, and toluidine dye in cuvettes to investigate chemical interactions and absorption dynamics. Conducted research about protein metabolism.
  - Developed a deeper understanding of point-of-care testing, the role of biomarkers in early disease detection, and the challenges of making diagnostics both accessible and cost-effective.
- **Erythrocyte Sedimentation Rate Research Paper** [JSR Research Paper](#) 2023 - 2024  
Research Question: What does an elevated erythrocyte sedimentation rate (ESR) indicate about the body's inflammatory process, and how can this be used to diagnose various disorders? published in *Journal of Student Research*

## FOOD & NUTRITION

- **Cooking Hope App, Cuddles Foundation** Mumbai 2026 - Present
  - Expanding pediatric oncology nutrition guide into a digital platform to increase accessibility, usability, and clinical reach for caregivers.
  - Collaborate with the Cuddles Foundation team to translate evidence-based nutrition content into an interactive format, enabling easier updates, personalization, and real-time resource delivery compared to a static book.
- **Cooking Hope Recipe Book, Cuddles Foundation** Mumbai, [Amazon Link](#) [Flipkart Link](#) [Cuddles Recipe Book](#) 2022-2025
  - Authored recipe book called ‘Cooking Hope: Easy Indian Recipes For Kids on Their Cancer Journey’ which aims to provide nutritious and easy recipes for young children diagnosed with cancer.
  - Written in 3 languages: English, Hindi, Marathi. Distributed to 40+ hospitals across 15 states in India. Helped 19,380+ children and families actively fighting cancer.
- **High School Initiatives, Leader and Founder**, American School of Bombay 2022 - 2024
  - Founded a Health and Nutrition CSR club with the objective of teaching about nutrition and importance of diet
  - Established a small organic garden in school to grow fresh produce, raised awareness about organic farming through posters & drives
  - Worked with school admin & staff to reduce food wastage by analyzing survey data to manage serving proportions

## COMMUNITY SERVICE

- **AmeriCares**, Mumbai, *Volunteer and Intern* 2021
  - Assisted with data analysis of blood samples from various slums in Mumbai to test for hypertension and diabetes
  - Raised awareness about hypertension and diabetes in slum areas by hosting informational sessions, informing the community members about how to interpret their bloodwork, and informing about the next steps they should undertake
- **Doorstep Organization**, Pune, *Volunteer and Teacher* 2015-2017
  - Taught 20 children of ages 5-13 Bharatnatyam dance, Motivated children to express themselves through movement

## BHARATNATYAM | INDIAN CLASSICAL DANCE

- **Akhil Bhartiya Ghandharva Mahavidyala Exams Bharatnatyam (ABGMV)** 2014 - 2023  
*Institution for the promotion and propagation of Indian classical music and dance*
  - Completing graduation in Indian classical dance (6th level) in 2024. Achieved first class in 1st Level Praveshika Pratham exam and 2nd Level Praveshika Poorna exam. Second class in the 3rd level Madhyama Pratham, 4th Level Madhyama Poorna and 5th Level Exam Visharad Pratham exam.
- **Rhythms of Bharatnatyam**, [Blog](#) 2020 - Present
  - Started a blog in 10th grade to raise awareness about classical dance and provide information on a young dancer's experience
  - Learned the importance of inspiring others, writing about authentic experiences, and sharing genuine advice

## ROBOTICS

- **India First Robotics Courses** 2015 - 2020
  - Designed the interface for an entertainment app and learned and mastered C+ and C++ coding
  - Learned about the functions of a 3D printer, designed and 3D printed a car using Creo 3D Modelling Software
- **First Tech Global Challenge by Qualcomm**, *Team Leader, Designer & PR Head* 2020
  - Created a 10-inch-by-15-inch robot with components like claw, wheels, and sensors to go through a series of obstacles in competition with other teams' robots (10th Rank). Taught orphaned children about the basics of robotics

## AWARDS AND HONORS

- **UCSD Triton Research Experiential Scholar**  
*Selected for Mentorship & Awarded \$1000 for Novel AI and Oncology Research*
- **UCSD Provost Honors**  
*Eligible students complete at least twelve graded units and receive a minimum grade point average of 3.5*
- **The ASB Mission Award** for Continuous Inquiry 2023 & 2024  
*Awarded by American School of Bombay for distinguished academic performance and class participation to one student in whole grade of 40 students*
- **The MBIS Mission Award** for Academic Excellence 2020  
*Presented by Mercedes Benz International School every year to one outgoing student out of 150 students with the best all-round performance in academics, co-curriculars, extracurriculars, and leadership*

## SKILLS AND INTERESTS

- **Languages:** Fluent in English, Hindi, Telugu
- **Computer Skills:** Python Coding, JavaScript Coding, HTML Coding
- **Other Interests:** Dance, Baking, Cooking, Painting, Drawing