Christian Camaño
San Francisco State University
707-322-1770
ccamano@sfsu.edu

Degree	College/University	Year	GPA
B.A Mathematics	San Francisco State University	2021-2023	3.954
B.S Computer science	San Francisco State University	2021-2024	3.959
A.S Mathematics	College of the Redwoods	2018-2021	4.000

Research Experience

- **Researcher | San Francisco State University Research Fellow** **February 2023 - Current**
  - *Bayesian Deep learning, Variational Inference*
  - Collaboration with Dr. Daniel Huang focusing on concurrent programming techniques for Bayesian deep learning. Work explores Stein Variational Gradient Descent, variational inference, and particle methods for neural networks.
  - Publications: *PusH: Concurrent Probabilistic Programming with Function Spaces* on arxiv.
- **Researcher | Caltech Research Fellow** **June 2023 - Current**
  - *Randomized Linear Algebra, Tensor Networks, Hamiltonian Simulation*
  - Collaboration with Ethan Epperly and Dr. Joel Tropp on novel algorithms for randomized tensor network contraction. Two papers currently under revision for publication.
- **Summer School Participant | Mathematical Sciences Research Institute (MSRI)** **June 2023 - August 2023**
  - *Dependent Type Theory, Formal Proof Verification*
  - Invited to attend a graduate seminar on theorem proving in `Lean4` representing San Francisco State University. Formalized a proof in functional analysis regarding the nonlinear Hahn Banach theorem now available in `mathlib`.
- **Researcher | Lawrence Berkeley National Laboratory (LBNL) REU** **June 2022 - August 2022**
  - *Randomized Linear Algebra, Tensor Networks, Hamiltonian Simulation*
  - Research under the guidance of Dr. Roel Van Beeumen on adopting the Sketched Rayleigh Ritz Algorithm to tensor networks. Work is ongoing.
- **Researcher | San Francisco State University / CAHSI NSF Fellow** **February 2022 - December 2022**
  - *Dimensionality Reduction, Manifold Theory*
  - Research under the supervision of Dr. Daniel Huang on manifold learning algorithms such as TSNE, UMAP, Laplacian Eigenmaps, and Parametric UMAP. To be presented at 2023 GmiS undergraduate research competition.

Scholastic Achievements

- **CSU Pre-Doctoral Summer Research Grant** 2023
  - Issued by: California State University System
- **LSAMP Proud award** 2023
  - Issued by: National Science Foundation (NSF)
- **Latinos in Technology Scholar 2023-2024** 2023
  - Issued by: Silicon Valley Community Foundation
- **BMC Scholarship in Computer Science** 2023
  - Issued by: San Francisco State University
- **Classes of the 1960's Endowed Scholarship** 2023
  - Issued by: San Francisco State University
- **Lilly M. Berry Scholarship** 2023
  - Issued by: San Francisco State University

- **Pamela Fong Scholarship in Mathematics** 2023
  - Issued by: San Francisco State University
- **SFSU Alumni Senior Scholarship** 2023
  - Issued by: San Francisco State University
- **Weinstien Family Scholarship** 2023
  - Issued by: San Francisco State University
- **Google Explore CSR scholarship recipient** 2022
  - Issued by: Google
- **CSU Pre-Doctoral Sally Cassanova Scholarship** 2022
  - Issued by: California State University System
- **Science Undergraduate Laboratory Internships (SULI) Scholar** 2022
  - Issued by: Lawrence Berkeley National Laboratory, United States Department of Energy
- **SIAM Student Chapter Certificate of Recognition 2021-2022** 2022
  - Issued by: SIAM
- **CAHSI REU Scholarship Recipient** 2022
  - Issued by: National Science Foundation (NSF)
- **Jack R and Marjorie J. Fraenkel Scholarship in Computer Science** 2022
  - Issued by: San Francisco State University
- **Jules H. Strauss Scholarship in Computer Science** 2022
  - Issued by: San Francisco State University
- **Latinos in Technology Scholarship 2022-2023** 2022
  - Issued by: Silicon Valley Community Foundation

Conference Participation & Presentations

- **Poster Presenter |Joint Math Meeting (JMM) 2024** **January 2024**
  - Scheduled to present research research on randomized algorithms for efficient tensor network contraction this January in San Francisco, California
- **Data Analytics Challenge Winner | Great Minds in STEM Conference 2023** **October 2023**
  - Recieved 1st place in a data analytics challenge during the Great Minds in STEM 2023 Conference in Pasadena, California.
- **Poster Presenter | Great Minds in STEM Conference 2023** **October 2023**
  - Presented research findings on UMAP and manifold embedding algorithms at the undergraduate research competition during the Great Minds in STEM Conference in Pasadena, California. Received Third place in the research poster competition
- **Poster Presenter | 51st Annual Whiskeytown Lake Mathematics Conference** **October 2023**
  - Presented research findings on UMAP and manifold embedding algorithms and participated in a discussion on projective geometry.
- **Research Presentation | Caltech** **August 2023**
  - Conducted a research presentation at Caltech during the summer of 2023, focusing on randomized tensor network algorithms.
- **University Representative | SIAM Computational Science & Engineering Amsterdam 2023** **March 2023**

- Selected as the representative for the San Francisco State University chapter to attend the SIAM Conference on Computational Science & Engineering in Amsterdam.

- **Poster Presenter | Joint Math Meeting (JMM) 2023** **January 2023**
  - Invited to present research conducted at Lawrence Berkeley National Laboratory during a poster session at the Joint Math Meeting 2023 in Boston.

- **Award Recipient | California Forum for Diversity in Graduate Education** **November 2022**
  - Honored with the Sally Casanova Pre-Doctoral Scholarship and invited to attend the California Forum for Diversity in Graduate Education.

- **Poster Presenter | Lawrence Berkeley National Laboratory (LBNL)** **August 2022**
  - Presented research on tensor networks and eigensolvers at Lawrence Berkeley National Laboratory to staff and fellow undergraduate researchers.

- **Conference Panelist | SIAM Conference on Parallel Processing for Scientific Computing (PP22)** **February 2022**
  - Invited to serve as a panelist discussing diversity, equity, and inclusion in applied mathematics, representing the undergraduate community in the field.

Community Engagement

- **President, SIAM Chapter at San Francisco State University** **February 2022 - Present**
  - Over the past two years, I have led the SIAM Chapter at San Francisco State University, coordinating guest lectures from professionals in academia, industry, and national laboratories to enrich the educational experience of applied math students.

- **Mathematics Tutor & Project Lead, San Francisco State University** **February 2022 - Present**
  - Since enrolling at San Francisco State University, I have provided tutoring services in a range of subjects, from introductory calculus to advanced linear algebra and analysis.

- **Embedded Mathematics Tutor & Project Lead** **August 2023 - Present**
  - Initiated involvement in an embedded tutoring program starting in Fall 2023, offering in-class academic support to early mathematics students at San Francisco State University.

- **Math Community Organizer, San Francisco State University** **February 2022 - Present**
  - Founded and currently manage an online Mathematics community forum at San Francisco State University, serving as a platform for over 450 students to engage in mathematics-related discussions and share academic experiences.