

Augustine Chemparathy

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EDUCATION

Stanford University, Stanford, CA Sep 2015-Jun 2019

- B.S. candidate, Bioengineering and Computer Science **GPA: 4.045/4.00**
- *Relevant coursework:* Machine Learning (CS 229), Biomedical Systems Prototyping (BioE 123), Systems Biology (BioE 101), Digital Systems Architecture (EE 180)
- GRE: Quantitative 169/170, Verbal 170/170, Analytical Essay 5.5/6
- SAT: Math 800/800, Critical Reading 800/800, Writing 800/800, Essay 12/12

EXPERIENCE

Dror Lab, Stanford Department of Computer Science June 2017-Present

Developing a computational pipeline to summarize noncovalent interactions in molecular dynamics simulations. Applying this pipeline to human muscarinic receptors to identify residues that can be targeted for drug discovery.

Porteus Lab, Stanford Institute for Stem Cell Biology June 2016-August 2018

Evaluated methods for genome editing of NK cells using CRISPR-Cas9 to produce chimeric antigen receptor (CAR)-natural killer (NK) cells for cancer immunotherapy against glioblastomas.

Jonikas Lab, Princeton Department of Molecular Biology June 2013-August 2014

Characterized the relationship between synthesis of the biodiesel precursor triacylglycerol (TAG) and cellular redox stress in a model microalgae. Presented research as a finalist at Intel STS 2015.

ACTIVITIES

Writing Tutor, Stanford Hume Center for Writing And Speaking Sept 2016-Present

Assisted undergraduate and graduate students at Stanford with all stages of the writing process including drafting, editing, and revising structure, organization, and clarity for term papers, theses, applications, and other academic writing pieces.

Teaching Assistant, Linear Dynamical Systems (EE 263), Stanford University Sept 2017-Dec 2017

Held office hours, wrote midterm problems and graded exams for 135 students in Stanford's highest-enrollment electrical engineering course.

Team member, Stanford ChEM-H Entrepreneurship Club Sept 2016-Dec 2016

Developed a scientific plan and business plan to develop a small molecule agonist for a metabolic regulator protein implicated in cellular energetic dysfunction in Parkinson's Disease; worked with a team of four undergraduates to develop the pitch and present it to a panel of medicinal chemists and VC's.

Co-President, Stanford Students in Biodesign (SSB) May 2017-Present

Coordinate recruitment, activities, and club organization for Stanford's undergraduate organization for interdisciplinary biosciences.

Tau Beta Pi, Stanford University Oct 2017-Present

Selected as a member of the Stanford Tau Beta Pi honor society. Recognizes students of exemplary character and distinguished scholarship.

HONORS AND AWARDS

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| • President's Award for Academic Excellence, Top 5% of Stanford Class of 2019 by GPA | 2017 |
| • Intel Science Talent Search Finalist | 2015 |
| • Davidson Fellow for Science | 2015 |
| • USA Junior Mathematics Olympiad Qualifier | 2013 |