eric.c.chen@yale.edu
858-761-3332

135 Prospect St.
New Haven, CT 06511

ERIC C. CHEN

EDUCATION

Yale University, New Haven, CT — 8/15 - present
- Pursuing B.S. in Biomedical Engineering, to be conferred by May 2019
- GPA: 3.94/4.00
- Major Courses: Linear Algebra and Matrix Theory, Organic Chemistry, Cancer Biology, Spanish for Medical Professions, Introductory Biology, Physics with lab, Physiological Systems, Psychology, Media and Medicine in Modern America

EXPERIENCE

Student Researcher: Yale Department of Laboratory Medicine, Dr. Tore Eid Laboratory, New Haven, CT — 7/16 – Present
- Currently studying the effect of gut microbiota on seizure intensity and frequency in Temporal Lobe Epilepsy (TLE)
- Established model of TLE via Intra-Hippocampal Kainic Acid Infusion
- Studied the effect of deep-brain stimulation in rat models of TLE

Software Engineering Intern: Wolfram Research Inc. Champaign, IL — 6/15 - 9/15
- Software engineer for data analysis and visualization
- Developed time-series data reduction algorithm for an efficient, high resolution alternative to the Round-Robin Database Tool
- Analyzed query data for internal and client usage dashboards
- Programmed in Mathematica, Perl, Python, and SQL

Research Intern: Biotechnology Lab in Embrapa Soja, Londrina, Brazil — 6/14 - 8/14
- One of 23 nationally-selected Borlaug-Ruan International Interns from the World Food Prize
- Studied soybean cultivar resistance to *Phytophthora Sojae* using Marker Assisted Selection of Single Nucleotide Polymorphisms
- Completed research paper and delivered oral presentation of research results to the World Food Prize

Research Intern: San Diego Supercomputer Center, San Diego, CA — 6/13 – 8/13
- Conducted computational biology research through the competitive Research Experience for High School Students program
- Identified association between immune epitope location and intrinsic protein disorderness
- Learned to program in SQL and Python to analyze the Immune Epitope Database

HONORS / AWARDS

- Yale College Global Health Scholar — 16 - Present
- Stacey Leondis Saybrook '08 Summer Research Grant — 16
- Yale College Freshman Summer Research Fellowship — 16
- Semifinalist, Siemens Competition in Math, Science & Technology — 14
- Finalist, National Chemistry Olympiad — 13
- Semifinalist, USA Biology Olympiad — 14
- California delegate to the World Food Prize Global Youth Institute — 13
- Co-chair of student advisory board for San Diego Science Fair — 14 - 15
- Southern California BioGENEius Award at California State Science Fair — 14
- American Invitational Mathematics Examination qualifier — 14
- National Merit Scholar, National AP Scholar — 14
- SAT II Math Level 2 (800), SAT II Chemistry (800) — 12

RESEARCH

Computational Biology Research: *"Novel B-cell Epitope Prediction from Intrinsically Unstructured Protein Region Positioning"* — 2/14
- 1st Place in Greater San Diego Science and Engineering Fair (GSDSEF) and 4th place in California State Science Fair
- Five professional society awards from Southern California Biomedical Council, Kaiser-Permanente, San Diego Supercomputer Center, American Statistical Association, and JOURNYS
- Project inspired from internship at San Diego Supercomputer Center, completed in collaboration with teammate at another high school

Healthcare Policy Research: *"An Analysis of Sterile Injectable Oncology Drug Shortages in the California Medicaid Program"*
- Presented at the interactive poster session at INFORMS Healthcare Analytics Conference, June 23-26, 2013, Chicago, IL — 6/13
- Manuscript submitted to *Medical Care Research and Review* — 10/16

LEADERSHIP AND EXTRACURRICULARS

- Healthcare Director of BulldogHacks, Yale's premier healthcare hackathon — 16
- Member of Yale Roosevelt Institute's Public Health Center — 16
- Volunteer at HAVEN Free Clinic, patient referrals (with Spanish language fluency) — 16
- President/Business Manager of Living Water at Yale a cappella — 16
- Director of Sponsor Relations for the Yale Math Competition — 16
- Member of Design for America's team to promote science and technology education in New Haven — 15 - 16

SKILLS

- Fluent in Spanish and Mandarin
- Matlab, Java, Python, SQL, SPSS, R, Mathematica Certification - Wolfram Technology Associate at Student Level
- Laboratory techniques: mouse coordinate brain surgery (depth and screw electrode, infusion cannula), micro-infusion, perfusion, intraperitoneal injection, tissue and blood collection, mass spectrometry, brain sectioning and staining, EEG recording and analysis, deep-brain stimulation, genotyping, DNA extraction, PCR, sequence analysis, recombination.