MAX THRUSH HUKILL

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HTTPS://GITHUB.COM/MHUKILL/MAX HUKILL.CV

EDUCATION

Kaiser Permanente Bernard J. Tyson School of Medicine, Pasadena, CA

July 2023 – present

M.D. expected in 2027

Bowdoin College, Brunswick, ME

Aug 2017 - May 2021

A.B. in Mathematics and Biochemistry

GPA: 3.94/4.00

Phi Beta Kappa, magna cum laude, Sunrise Prize in Cinema Studies, Math Honors

RESEARCH EXPERIENCE (SEE GITHUB)

Mathematics Dept. and Ecology Dept. collaboration, Bowdoin College, Brunswick, ME

Mar 2020 – present

Student Researcher & Honors Project on Bumblebee Behavior; data from Patty Jones, PhD; Advisor: Jack O'Brien, PhD

- Developed computational Bayesian statistical model for data describing bumblebee behavior
- Engineered a hierarchical regression scheme in R for novel inference of a complex array of biologically pertinent parameters
- Implemented both discrete- and continuous-time Markov chain representations of the state space, using Metropolis-Hastings and Markov chain Monte Carlo techniques for inference

Mathematics Dept. and Neuroscience Dept. collaboration, Bowdoin College, Brunswick, ME

Mar 2020 - Aug 2021

Student Researcher on Cricket Behavior; data from Hadley Horch, PhD; Advisor: Jack O'Brien, PhD

- Designed a behavioral assay for cricket response to auditory stimulus
- Engineered a bioinformatic pipeline and developed novel metrics for analysis
- Developed visualization schemes for the data transformed by our pipeline

Chemistry Dept., Bowdoin College, Brunswick, ME

Aug – Dec 2019

Student Researcher, Advisor: Benjamin Gorske, PhD

- Using solution-phase organic chemistry, designed, synthesized, and analyzed biomimetic thiopeptoids targeting the WW binding domain relevant to cancer and Alzheimer's pathways
- Applied theory of $n \rightarrow \pi^*$ interactions to design peptoid foldamers mimicking naturally occurring peptides

PROFESSIONAL EXPERIENCE

The College Preparatory School, Oakland, CA

Jul 2022 - May 2023

Mathematics Faculty and Admissions Associate

- Taught high school math (algebra, calculus, probability theory, complex analysis) focusing on student-led discovery method
- · Conducted admissions outreach, focusing on Spanish-speaking communities in the Bay Area
- · Organized, graded, and coordinated the placement of incoming students

La Clínica de la Raza, Casa CHE, Oakland, CA

Fall 2021

Community Health Educator II

- Canvased communities in Oakland's Fruitvale district to improve COVID-19 vaccination confidence and uptake
- Strategized and executed bilingual community outreach projects virtually, over the phone, and in person
- Helped build lasting relationships between La Clínica and the community it serves, emphasizing restorative health justice

Kaiser Permanente Oakland Hospital, Perioperative Clinic, Oakland, CA

Summer 2019

Quality Improvement Research Intern, Advisors: Renuka Yeldandi, MD, Stephen Sarafian, MD

- Led project seeking to improve patient care experience through early educational intervention on postoperative delirium
- Conducted extensive interviews with patients and health care providers
- · Administered Mini-Cog exams and delirium education to patients

Kaiser Permanente Oakland Hospital, Hospital-Based Medicine, Oakland, CA

Summer 2018

Research Intern, Advisors: Yu-Te Lee, MD, Loveleena Virk, MD

- Collaborated with hospitalists and LEAN Methodology project managers to increase hospital discharge efficiency
- Interviewed patients and hospital staff to develop "The Discharge Card," a patient-education and hospital efficiency tool in various cycles

SKILLS AND HOBBIES

Language skills: Spanish (professional working capacity), Portuguese (conversational), English writing coach Computer skills: R statistical software (including Stan), LaTeX, Microsoft Office, advanced video editing, Anki Hobbies: classical piano, cooking/baking, cinema, video games, board/card games, tennis, swimming, hiking