

EDUCATION	California Polytechnic State University <i>M.S. in Mathematics (Applied Math Specialization)</i> • GPA: 3.77 / 4.00 San Luis Obispo, CA <i>(expected)</i> June 2025
	California Polytechnic State University <i>B.S. in Mathematics (Applied Math Concentration)</i> • Minors in Statistics, Anthropology & Geography • GPA: 3.53 / 4.00 • 7-time Dean's List San Luis Obispo, CA June 2023
RESEARCH INTERESTS	Applied mathematics; specifically, the intersection between mathematics and biological, ecological, or social systems. Discrete models on social networks, or continuous models with SIR-adjacent framework.
PAPERS	Gross, L., Stewart, A., Thai, G. , Paquin, D. (2024) <i>Numerical Analysis of Critical Values for Remission During Imatinib Treatment of Chronic Myelogenous Leukemia</i> . In revision. Tully-Doyle, R., Adlin, L., Thai, G. , Tiscareno, S. (2023) <i>Pick Functions as Cauchy Transforms of Colored Graphs</i> . Preprint. https://arxiv.org/abs/2410.10695 .
POSTERS AND PRESENTATIONS	Paquin, D., Gross, L., Stewart, A., Thai, G. (2024) <i>Mathematically Modeling Chronic Myelogenous Leukemia</i> . Upcoming talk in Jan 2025 at the Joint Mathematics Meetings in Seattle, WA. Tully-Doyle, R., Adlin, L., Thai, G. , Tiscareno, S. (2023) <i>Graph Theoretic Interpretations of the Nevanlinna Representation</i> . Poster presented in Jan 2024 in the PME Poster Session, at the Joint Mathematics Meetings in San Francisco, CA. Tully-Doyle, R., Adlin, L., Thai, G. , Tiscareno, S. (2023) <i>Graph Theoretic Interpretations of the Nevanlinna Representation</i> . Talk given in Nov 2023 at the 2 nd CSU Mathematical Sciences Conference in Bakersfield, CA. Lin, J., Ellwein, S., Thai, G. (2023) <i>Using Machine Learning to Improve Treatment Targeting in Farmer Training</i> . Poster presented in June 2023 at the Cal Poly Beacon Research Symposium in San Luis Obispo, CA. Liese, J., Klig, C., Lane, R., Moscot, M., Thai, G. (2022) <i>Characterizing Singular Graphs with Games</i> . Poster presented in June 2023 at the Cal Poly Bailey College Student Research Conference in San Luis Obispo, CA. Liese, J., Klig, C., Lane, R., Moscot, M., Thai, G. (2022) <i>Characterizing Singular Graphs with Games</i> . Talk given in Nov 2022 at the 1 st CSU Mathematical Sciences Conference in Northridge, CA.
TEACHING EXPERIENCE	Graduate Teaching Associate — Instructor of Record <i>California Polytechnic State University, San Luis Obispo</i> MATH 118, 119 Jan 2024 - June 2024 • Created lecture material, in-class worksheets, quizzes and exams for a 35-student class each academic quarter, across two quarters • Graded weekly homework assignments/assessments, held office hours twice a week • Attended Graduate Teaching Seminar to discuss best teaching practices Instructional Student Assistant <i>California Polytechnic State University, San Luis Obispo</i> MATH 476 Apr 2023 - June 2023 • Graded weekly homework and coding assignments

RESEARCH EXPERIENCE	Graduate Research Assistant — Supervisor: Dana Paquin <i>Mathematically Modeling Chronic Myelogenous Leukemia</i> June 2024 - Present
	<ul style="list-style-type: none"> Developed MATLAB scripts to simulate system of delay-differential equations and find time to remission, minimum cancer/maximum T-cell concentration Constructing goodness-of-fit metric comparing simulated T-cell curve to patient data Co-authoring a paper on a parameter analysis of the DDE model under continuous treatment and treatment interruptions
	Undergraduate Research Assistant — Supervisor: Ryan Tully-Doyle <i>Graph Theoretic Interpretations of the Nevanlinna Representation</i> June 2023 - Sep 2023
	<ul style="list-style-type: none"> Coded Mathematica functions to generate graph products, adjacency matrices and representing functions to keep track of possible paths Proved two-variable representing function results for graphs joined at common vertex
	Undergraduate Senior Project — Advisor: Elena Dimitrova <i>Exploring Community Structure in Online Discourse with Python</i> Apr 2023 - Sep 2023
AWARDS AND HONORS	<ul style="list-style-type: none"> Constructed mention-based network from vaccination-related tweets with NetworkX Ran Louvain algorithm and calculated degree centrality across communities Used sentiment analyzer from nltk library in Python to quantify and compare tweet sentiment within communities
	Undergraduate Research Assistant — Supervisor: Joyce Lin <i>Using Machine Learning to Improve Targeting for Farmer Training</i> Jan 2023 - June 2023
	<ul style="list-style-type: none"> Used Pandas and NumPy libraries in Python to clean Cambodian survey data (baseline and endline), construct income features
	Undergraduate Research Assistant — Supervisor: Jeffrey Liese <i>Characterizing Non-Singular Graphs with Games</i> June 2022 - Sep 2022
	<ul style="list-style-type: none"> Generated graphs, adjacency matrices, optimal strategy vectors using Mathematica Proved non-singularity for four graph families by partitioning vertices, finding optimal strategy on adjacency matrix game
SOFTWARE	Graduate Assistant Fellowship Sep 2024 – Awarded to fund master’s thesis in collaboration with math faculty member.
	Frost Undergraduate Research Fund June 2024/2023/2022 – Awarded to fund summer research projects in collaboration with mathematics faculty.
	Edward van Duyne Scholarship June 2024 – Awarded to all class levels of Mathematics students with minimum 3.0 GPA.
	Cal Poly Beacon Research Grant Jan 2023 – Awarded to underrepresented students to fund research projects with faculty member.
	Programming: Python, MATLAB, Mathematica, R Python Libraries: Pandas, Numpy, Matplotlib, NetworkX Typesetting: L ^A T _E X (Beamer, TikZ)