

Eliam Chang

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EDUCATION

Vanderbilt University

Majors: Biomedical Engineering & Computer Science

Minor: Digital Fabrication

GPA: 3.82

Nashville, TN

Class of 2026

EXPERIENCE

Kang Lab

Research Assistant

Nashville, TN

October 2023 – present

- Applied drug treatments to GAT-1 and GAT-3 mutated cells to evaluate difference in protein expression and function.
- Conducted PEI-mediated transfection for cDNA and performed Western blotting for protein detection and quantification

Ascension Saint Thomas West

Patient Care Technician (PRN), Cardiac Telemetrist (PRN)

Nashville, TN

April 2023 – December 2023, January 2024 – June 2024

- Monitored 50 at-risk patients by tracking electrical activity patterns in the heart to detect life-threatening rhythms
- Assisted nurses by communicating patient rhythms, admit, and discharge with medical technicians to solve patient complications

Venodynamics

Biomedical Engineering Intern

Nashville, TN

January 2024 – May 2024

- Developing an Inferior Vena Cava model to test for full occlusion with the Venodynamics Heart Failure Treatment Device
- Writing a clinical trial research paper comparing the abilities of cardiologists against our device in detecting full occlusion
- Fundraising for four emerging Wond'ry biomedical startups through interviewing biomedical investors across the United States

Vanderbilt Wond'ry Map the Systems

Competitor

Nashville, TN

September 2023 – January 2023

- Combated disparities within the diagnosis and treatment of Alzheimer's by researching, mapping, and presenting findings
- Interviewed over 12 caretakers, physicians, policymakers, lawyers, and professors to understand and present on Alzheimer's care

Vanderbilt Institute of Nanoscale Science and Technology

Summer Intern, Technical Crew Member

Nashville, TN

May 2023 – August 2023, September 2023 – December 2023

- Compared and presented on sputter, electron-beam, and resistive deposition on optimal thin-film properties of Al, Al₂O₃, and Cr
- Maintained and troubleshoot multi-million-dollar instruments to enable users to conduct seamless research

COMMUNITY SERVICE

Vanderbilt Special Olympics

Vice President, Sports Coordinator, Treasurer

Nashville, TN

August 2022 – Present

- United the greater Vanderbilt community with over 25 neurodiverse individuals by coaching them in various athletic events
- Facilitated Vanderbilt relations with Tennessee Special Olympics by organizing a Polar Plunge to raise money for athletes

Nu Chapter Beta Upsilon Chi

Community Service Chair, Recruitment Chair

Nashville, TN

October 2023 – Present

- Raised awareness for food insecurity by coordinating brothers in serve, educate, and fundraise for 14 non-profits organizations
- Planned 10 recruitment events in order to select 8 new members from an applicant pool of over 40 Christian individuals

Forest Hills Baptist Church

Assistant 3rd Grade Teacher, Worship Team Member

Nashville, TN

September 2023 – present

- Implemented a virtually broadcasted Sunday service to provide a worship experience for those unable to attend in-person
- Engaged youth members by designing and teaching a bible curriculum and incorporating music from 12 years of cello experience

SKILLS & INVOLVEMENT

Skills: Fusion 360, Python, Java, MATLAB, JavaScript, CSS, HTML, Mandarin (fluent), Spanish (conversational), Orchestral Cello

Interests: Teaching chess to others, Eurovision watch-parties, Golden State Warriors, Color-coordination, Catan boardgame

Campus Involvement: Resident Advisor (RA), Bellan Lab Research Assistant (October 2022 – July 2023), Tikum Olam Makers