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AI for social good researcher and builder applying technical depth to increase AI accessibility and social impact

EDUCATION

Senior, Bellarmine College Preparatory, San Jose, California **Class of 2027**

- GPA: 4.0/4.0 SAT: 1520/1600
- Advanced courses: AP Chinese Language and Culture, AP Biology, AP United States History, AP English Literature, AP Computer Science A, AP English Language and Composition, AP Chemistry, AP Psychology, Advanced Data Structures (Post-AP course in Computer Science), AP Calculus BC.
- Relevant extracurriculars: Founder of Everything Is Good, Product Lead for Navigator, Founder of Baik, Lead High School Volunteer at Saratoga Area Senior Coordinating Council (SASCC), Published Author with the Institute of Electrical and Electronics Engineers (IEEE), Technical Program Committee Member for IEEE Academic Conferences, AI Column journalist with the Outlook, Founder of What The AI, President of Academic Research Mentoring, Student Chair of the Bellarmine Symposium on STEM and Society, Curriculum Director of the AI Club, Research intern with Professor Ji-Ping Wang of Northwestern University.

AI SOCIAL IMPACT AND ACCESSIBILITY PROJECTS/RESEARCH

Founder, Everything Is Good (navigating.space) **2025-Present**

- Founded a **501(c)(3)-recognized** nonprofit working towards increasing the social impact and accessibility of AI through solutions improving our communities' institutions
- Led development of Navigator, an AI platform for nonprofits possessing deep internal, mission-focused knowledge simplifying tasks taking hours to a matter of seconds and freeing frontline workers to focus on serving their communities
- Developed features rivaling those of OpenAI and Anthropic without barriers to enterprise access, especially for underfunded, undersized charitable institutions
- Created and led an **overseas team in India** of adult engineers and project managers assisting product development
- Working closely with local nonprofits and social organizations in testing and refining solutions before broad-market release, with integration aimed at workflows such as grant-finding and report creation
- Invited as a guest speaker to A Modern Nonprofit and Mission Matters Innovation, industry podcasts on leadership, technical advancement, and strategy featuring industry leaders as guests. Discussions around effective AI adoption in nonprofit operations and how to encourage responsible, safe use by staff.
- Bylined author of article on why nonprofits should use AI to assist with staff workloads in industry publication reaching over 650K readers monthly

Product Lead, Navigator **2025-Present**

- Led product development and coordinated across a multinational team for Navigator, an AI solution by Everything Is Good
- Designed an AI system for deep **internal knowledge and insight creation**, allowing it to simplify tasks requiring hours such as research and information-gathering into seconds, freeing staff at nonprofits to focus on the frontlines rather than back-office tasks
- Created an optimized, accessible platform allowing for advanced AI workflows without barriers such as expensive per-seat pricing or minimum employee counts, rivaling tools from companies such as OpenAI and Anthropic with comparable agentic harnesses and systems for complex understanding of internal knowledge
- Early access integrated in operations reaching over 300,000 individuals in Santa Clara County. Users include nonprofits and social organizations.

- In a case study with a local senior services organization, Navigator reduced expansion and partnership work from 4 hours to 30 minutes, and grant-application research from 8-12 hours to 1-4 hours. Saved time for the organization was redirected towards strategic, fundraising, and frontline coordination work.

Researcher, Finetune-Then-Merge (ieeexplore.ieee.org/document/11391195/) **2024-2025**

- Conducted research on democratizing access to LLMs through optimizing models efficiency between knowledge and compute requirements
- Developed a novel technique of model optimization through combining the skills of specialized "expert" models, outperforming industry-standard techniques
- Validated method performance in knowledge across broad STEM domains, with the optimized model **outperforming** its base model by 31.70% in key knowledge benchmarks
- Finetune-Then-Merge additionally produces optimal model efficiency, outperforming comparable models from top companies and labs such as **Meta and Google DeepMind**
- Published as sole independent researcher for Finetune-Then-Merge in **IEEE Xplore** under the 3rd International Conference on Foundation and Large Language Models (FLLM 2025), a collegiate and professional research conference
- Among youngest presenters at FLLM 2025, comprised largely of multinational professionals and professors affiliated with established institutions
- Selected as Chair of Poster Sessions at the 3rd International Conference on Foundation and Large Language Models (FLLM2025)

Lead Researcher, Synthetic Data Replacement in Dermatology: Effects on External Generalization **2026-Present**

- Researched failure cases of synthetically-generated data in AI models used for diagnosing skin lesions.
- Designed synthetic data generation pipeline involved in modulating skin complexion of samples from PAD-UFES-20 dataset using frontier image generation models such as Nano Banana 2 and GPT-Image-2, with instructions to preserve skin lesion fidelity.
- Led training of MobileNet V2 and EfficientNet-B0 model architectures at varying ratios of synthetically-replaced data, finding consistent drops in predictive accuracy across both architectures with synthetic data inclusion. Models performed worse than guessing with synthetic lesion data.
- Coordinated clinical review, where professional dermatologist identified that synthetically-generated images appeared visually plausible with verified lesion images, but contained distorted texture and skin pigmentation upon closer analysis.
- Led paper-writing and coordinating rebuttals to peer-reviewers, and switching venues due to author age restrictions
- Paper accepted for publication at the IEEE 2026 International Conference on Artificial Intelligence Models and Systems (iAIMS)

Intern, Professor Ji-Ping Wang (Northwestern University Department of Statistics and Data Science Chair) **2026-Present**

- Conducted research on implementing custom Machine Learning approaches to real-world biology implementations by predicting nucleosome condensability from sequence content, under the guidance of Professor Ji-Ping Wang
- Ablated different architectures such as NLP-based BERT models, as well as a custom Inception-ResNet LSTM architecture
- Leveraged data processing and visualization to prepare datasets scoped based on nucleosome peaks matched to 147-base-pair reference sequences, as well as condensability scores measured from in-vitro assays

Technical Program Committee Member, 4th International Conference on Foundation and Large Language Models, International Conference on Artificial Intelligence Models and Systems and International Workshop on Foundation Models and Multimodal Intelligence **2026-Present**

- Served as youngest member of the Technical Program Committee for IEEE-affiliated conferences on LLMs and AI alongside university professors, industry professionals, and PhD students.
- Contributed to program and discussions of conference through providing peer-reviews of submissions from authors to the 4th International Conference on Foundation and Large Language Models, reviewing papers based on personal expertise.

- Invited to serve in committee by Chairs of the 4th International Conference on Foundation and Large Language Models and International Conference on Artificial Intelligence Models and Systems.

Founder, Baik (baikai.org) **2024-Present**

- Developed app for rural schools in Indonesia bringing offline AI-enhanced educational technology to students and teachers in digitally-excluded areas
- Incorporated efficient AI models with on-device performance optimizations while producing a solution bringing assistive technology to regions with limited internet access and low-end hardware
- Visited Indonesia and gathered feedback from teachers and students at various schools, used to refine early versions of the app
- Led an international team to ensure smooth development collaboration and coordination between schools, as well as developers while building Baik

President*,* Academic Research Mentoring (ARM) **2025-Present**

- Led shift to effective research opportunities for students, focusing on publication and research experiences for members
- Provided research opportunity through a university professor's speaking session with ARM, discussing their work, and offering students an internship opportunity
- Spearheaded accessible research opportunities for members by founding first research symposium at Bellarmine College Preparatory with institutional endorsement and close collaboration with faculty, as well as student authors

Organizer and Student Chair*,* Bellarmine Symposium on STEM and Society **2025-Present**

- Led first undergraduate research publication at Bellarmine College Preparatory, the **Bellarmine Symposium on STEM and Society** focusing on how STEM and AI harm or benefit our communities
- Organized a collaborative effort through the Bellarmine Symposium on STEM and Society between faculty and the administration with official institutional endorsement and student interest
- Garnered interest across multiple schools, with interest from students outside of Bellarmine and submissions open to students regardless of institution
- Recruited faculty in advanced subjects adjacent to STEM to peer-review all submissions, and also designed double-blind paper review process for the symposium
- First iteration of the Bellarmine Symposium on STEM and Society garnered 19 author submissions and over 60 attendees, second iteration for Spring 2027 planned due to greater-than-expected amount of author submissions
- Awarded by Bellarmine College Preparatory for leadership in founding the first Bellarmine Symposium on STEM and Society

Lead High School Volunteer, Saratoga Area Senior Coordinating Council (SASCC) **2024-Present**

- Volunteered for 300+ hours with SASCC, spearheading a push to expand their technology support sessions to encompass **AI literacy** for older adults
- Worked extensively with older adults through in-person tech support sessions covering everyday technology use, as well as introducing older adults to AI apps such as ChatGPT
- Played key role in incorporating AI systems into **service delivery workflows** for beneficiaries

Journalist, AI Column in The Outlook newspaper (theoutlookonline.org) **2024-Present**

- Led a monthly AI column for their newspaper, the Outlook, a widely-distributed and key local publication
- Authored AI content ranging from tips on getting started with using AI apps to insights on current AI scams and deepfakes

Curriculum Director, Bellarmine College Preparatory AI Club **2025-Present**

- Shifted activities to focus on emerging AI trends such as Generative AI, as well as emphasizing foundational AI theory in initial meetings for new members
- Led push to increase member engagement, resulting in the club growing to 100+ members in the 2025-2026 school year
- Led research team identifying failure cases of diagnostic classification models with unfiltered synthetic data, and submitted paper to a post-secondary IEEE conference

Editor, What The AI (whattheai.xyz) **2024-Present**

- Founded blog drawing upon personal knowledge of AI from academic research, as well as developing advanced AI systems to explain new developments in simple terms
- Focused on explaining key Machine Learning theory to audiences unfamiliar with AI, aimed at increasing the accessibility of AI knowledge with short- digestible content on topics such as Neural Networks and model efficiency optimization

Member, Team 254 **2023-2025**

- Worked as a founding member of the FIRST Tech Challenge (FTC) division of the robotics team in both non-technical finance and technical software fields
- Experimented with Machine Learning workflows for object detection, aimed at improving scoring potential in tournaments
- Introduced a new method of collecting contributions through fundraisers at popular restaurants and similar venues, implemented across all FTC teams and constituting a majority of contributions collected by teams in the FTC division amid uncertainties with grant-based funding.

ACADEMIC HONORS/AWARDS

- Published IEEE Xplore Author with Finetune-Then-Merge: Democratizing Large Language Model Accessibility Through Efficiency Optimization at the 3rd International Conference on Foundation and Large Language Models, 2025
- Certificate of Appreciation from the 3rd International Conference on Foundation and Large Language Models, 2025
- Invitation to the Technical Program Committee of the 4th International Conference on Foundation and Large Language Models, 2026
- Invitation to the Technical Program Committee of the International Conference on Artificial Intelligence Models & Systems, 2026
- Invitation to the Technical Program Committee of the International Workshop on Foundation Models and Multimodal Intelligence, 2026
- Arrupe Service Distinction from Bellarmine College Preparatory, 2026
- Poster Session Chair at the 3rd International Conference on Foundation and Large Language Models, 2025
- Data Science and Machine Learning: Making Data-Driven Decisions by MIT IDSS Certificate, 2025
- Presentation of Baik App to Indonesian schools and District Administrators, 2024
- Bellarmine College Preparatory award recognizing vision leadership and founding the Bellarmine Symposium on STEM and Society, 2026
- Invitation to speak on A Modern Nonprofit podcast by The Charity CFO, a firm specializing in assisting nonprofit finance and development teams, 2026
- Invitation to speak as a guest on Mission Matters Innovation Podcast, 2026
- Acceptance of Synthetic Data Replacement in Dermatology: Effects on External Generalization to the IEEE International Conference on Artificial Intelligence Models and Systems, 2026
- Published IEEE Xplore author with A Multimodal Affective Mandarin Protocol for Non-Invasive Brain-to-Text and Emotion-State Decoding at the 3rd International Conference on Image Processing, Multimedia Technology and Machine Learning, 2026
- Published IEEE Xplore author with A Deployment-Oriented Framework for Multimodal EEG Foundation Models at the 3rd International Conference on Image Processing, Multimedia Technology and Machine Learning, 2026