SHENGBO JIANG

Palo Alto, CA · jiangmicheal324@gmail.com · (203)-536-7510 ·

GitHub: github.com/Shengboj0324 · LinkedIn: linkedin.com/in/micheal-jiang-16a03b334

SUMMARY

High school junior with a strong record of technical leadership, research-driven AI projects, and shipped products. iGEM 2024 Gold Medalist (Tech Lead). USACO Silver (2024). Led teams that built production web/iOS applications and developed locally trained ML systems for sustainability and accessibility. Seeking a research internship at the Stanford AI Lab to contribute to multimodal modeling and scientific machine learning.

EDUCATION

Kehillah Jewish High School, Palo Alto, CA — Junior (Expected 2027)

- Transferred from **Hamden Hall Country Day School**, New Haven, CT (2023–2025)

LEADERSHIP & EXPERIENCE

Tech Lead · LCG-China (iGEM 2024) — Gold Medal

- Led technical development for iGEM project, building computational tools and web applications that supported wet-lab/engineering workflows.
- Coordinated with interdisciplinary sub teams; delivered award-winning software components on a fixed competition timeline.
- Computational workstream focus **antimicrobial peptides (AMPs) for medical use** — built sequence design/evaluation tools, integrated docking/structure prediction outputs, and engineered data pipelines to support AMP screening and reporting.
- Developed a **bioactive bacterial-cellulose dressing functionalized with modular AMPs** that **accelerates wound healing upon contact with wound exudate/skin**, enabling moisture/ion-triggered AMP presentation; authored technical documentation

Cofounder & Tech Engineer · Rematter Cooperation — Palo Alto, CA (2024–Present)

- Architected and shipped **Releaf — Ultimate Sustainability**, an iOS app with advanced AI features fine-tuned for environmental sustainability Q&A.
- Helped raise **$2,000+** in funding; team won a **top-two prize** in a competition in China.
- Drove product roadmap and engineering execution across mobile, backend, and AI components.

Tech Lead · Carbon Footprint Club (Hamden Hall CDS) — New Haven, CT (2023–2025)

- Built databases and web applications powering the club's carbon-tracking platform.
- Deployed public site: **carbontrackapp.com**; organized student contributors and maintained code quality.

Team Leader · Math Team (Hamden Hall CDS) — New Haven, CT (2024–2025)

- Led training and contest strategy; achieved **highest score in the Greater New Haven League (2024)**.

Cofounder · Science Seed Project — (2024–Present)

- Built a platform providing free online science courses for children with limited educational resources.
- Designed and trained a **ML model for live translating live video speech into sign language**, developed and trained **100% locally**.

RESEARCH & SELECTED PROJECTS

Astrobio-gen — Open-source AI System (2024–Present)

- Sole developer of a fully trained, open-source AI model combining **multimodal capabilities**, a **parameter-trained LLM**, a **galactic model**, **advanced attention**, **noise-reduction**, and **hierarchy learning**.
- **Specific astrobiology study:** exoplanet habitability & biosignature likelihood mapping — fusing stellar activity, orbital/planetary parameters, and transmission/emission spectra; integrates a Milky Way–scale galactic prior for habitability gradients; trained/evaluated on public catalogs (e.g., NASA Exoplanet Archive) with uncertainty estimates and capability of creating demo evolutionary process.
- Trained entirely locally; responsible for data pipelines, training/inference, and evaluation.
- Targeted for an ISEF research submission.

Releaf — Ultimate Sustainability (iOS) — Rematter Cooperation (2024–Present)

- Production mobile app delivering domain-specialized sustainability answers via fine-tuned AI.
- Implemented model prompt/response flows, content safety, and app instrumentation for iteration.

CarbonTrack Web Platform — Carbon Footprint Club (2023–2025)

- Student-run website and database for carbon-footprint tracking and education; public launch at **carbontrackapp.com**.

AWARDS & HONORS

- **iGEM 2024 — Gold Medal**, LCG-China (Tech Lead)
- **USACO Silver — 2024**
- **Greater New Haven League — Highest Scorer (2024)**
- **Top-two prize** in a competition in China (Rematter Cooperation); raised **$2,000+** in project funding

SKILLS

- **AI/ML:** Multimodal modeling, parameter-efficient training, attention & hierarchy learning, noise-reduction techniques; local training & evaluation
- **Software:** iOS app development; web app development; database design; RESTful APIs; version control (**Git/GitHub**)
- **Leadership:** Technical road mapping, cross-functional team coordination, mentoring student contributors

SELECTED LINKS

- Carbon Tracking Platform: **https://carbontrackapp.com/**
- Rematter Cooperation: **https://remattercooperation.org/**
- GitHub: **github.com/Shengboj0324** (active contributor; daily work on multiple projects)
- LinkedIn: **linkedin.com/in/micheal-jiang-16a03b334**