Naman Siddheshwar

San Jose, CA · hello@namansiddheshwar.com · 408-666-6083 · namansiddheshwar.com · steam-coach.org

Education & Skills

BASIS Independent Silicon Valley Expected May 2027
San Jose, California GPA: 4.0 unweighted · 4.8 weighted

SAT: 1590/1600 (790 Math, 800 English) · **Programming:** Python, C++, Java, JavaScript · **Tools:** Node.js, MongoDB, NumPy

Technical & Research Experience

STEAMCOACH, Founder & Lead Developer 2023–present

- Founded an AI-powered STEM practice platform with Science Bowl simulation, text-to-speech, buzzer practice, and learner analytics, used by students, nonprofits, and local PTAs.
- Designed a solution-centric automatic question generation pipeline for complex STEM and Olympiad problems; submitted research to WAIE.

Arrcus Inc., Software Engineering Intern Summer 2026

- Developed CLI Composer, an MCP-based agentic pipeline that generates command-line interfaces from YANG models in a shared production networking codebase.

Independent Music Technology / ML, Researcher & Developer 2024–present

- Developing a recommender system for older listeners and cognitive engagement using music embeddings, similarity modeling, and DSP-based benchmarks.
- Built a real-time sustain-pedal visualizer using microphone audio, harmonic decay, resonance, and spectral flux to support piano pedagogy.

Algoverse, AI Researcher Summer 2026

- Investigated LLM reasoning, designed an experimental evaluation pipeline, and coauthored a paper submitted to a NeurIPS workshop.

Engineering & Robotics

VEX Robotics Team, Programming Lead 2023–present

- Developed C++ autonomous routines with PID control, motion profiling, and sensor integration; helped the team reach the VEX U.S. Open division final.

MIT Beaver Works: Build a CubeSat Challenge 2025–present

- Placed fifth of approximately 80 teams; developed lunar-dust imaging algorithms and evaluated sensor noise and system-design tradeoffs.

Penn Engineering Summer Academy: Robotics Summer 2026

- Built an ESP32-controlled robotic piano using solenoids and servos, integrating software, electronics, and mechanics.

Leadership, Teaching & Service

BASIS Science Bowl, MS President/Mentor; HS Chemistry Lead 2024–present
Lead practices and build prep tools; mentored the middle-school team to third at regionals and advised a national-qualifying You Be the Chemist team.

Oclef, Junior Piano Instructor 2025–present
Teach younger pianists and prepare students for Certificate of Merit performance and music-theory exams.

Memory-Care Concerts, Volunteer Pianist 2023–present

MIT Build a CubeSat Club, Founder & President 2026–present

Music & Selected Honors

Composer & Pianist 2014–present
Composed and conducted an original piano quartet with the San Jose Youth Symphony Orchestra; third place in a statewide composition competition.

Honors: National Merit Semifinalist · AIME Qualifier · USACO Silver · ACSL Finalist · VEX U.S. Open Division Finalist · three-time AP Scholar with Distinction