

ADAM TANG

+1 (301) 275-6996 | US Citizen | adamtang0715@gmail.com | [Linkedin](#) | [Github](#) | [Portfolio Website](#) (in progress)

EDUCATION

University of California, Berkeley | BS in Electrical Engineering and Computer Sciences Berkeley, CA
Bachelor of Science in Electrical Engineering and Computer Sciences, Minor in Bioengineering Expected June 2029

- **Relevant Coursework:** CS61A (Python/Scheme/SQL), Math 53 (Multivariable Calculus), Engineering 92, Newton Changemaker Lecture Series (Innovation + Entrepreneurship), Bioengineering 26

Phillips Exeter Academy | High School Diploma Exeter, NH

- 1600 SAT | **Coursework:** Multivariable Calc, Linear Algebra, Accel. Bio/Chem/Physics September 2021 - June 2025

SKILLS

Programming: Python, TypeScript/JS (Next.js, React, Tailwind, MDX/shadcn), Java, SQL, MATLAB, AI/ML (some)
Engineering Tools: ANSYS, CAD (Fusion 360, Onshape, FreeCAD), Arduino, RPi, KiCad PCB Design, 3D Printing
Skills: Human-Centered Design, Leadership, Public Speaking, Team Management, Stakeholder Engagement, Mandarin Proficiency

WORK EXPERIENCE

MUREX Exeter (MATE Marine Robotics Competition Team) Exeter, NH
Mechanical Lead November 2021 - June 2024

- Led design of fully custom 6-DOF underwater ROV; independent buoyancy module and 7-DOF manipulator arm w/ Onshape
- Reduced commercial costs by **88%** via in-house design and manufacturing; team placed **6th globally at MATE 2024**
- Team broke **10 industry records**, including creating the world's smallest and most affordable network switch
- Earned Best Engineering Presentation, Perfect CAD, and Best Poster

Research Intern: Microplastic Pollution in Rivers (Catholic University of America, CEE Dept) Washington DC
First Author, Researcher June 2022 - August 2024

- Simulated microplastic dynamics in vertical table using **hydraulic flume**, quantified microplastic pollution in local rivers
- Developed **drone-based sampling systems** for microplastics detection in inaccessible river zones
- Authored **first-author research paper** ([link](#)) on vertical dispersion of microplastics; selected presenter at **WaterSciCon2024**
- Recognized with NASA, EPA, GENIUS Olympiad, ISEF, and Stockholm Junior Water Prize awards

Formula 1 in Schools Exeter, NH
Mechanical Lead September 2022 - June 2023

- Designed F1 car using Fusion 360/ANSYS simulations; optimized aerodynamics via iterative testing in wind tunnels
- Achieved **1st place at State Finals 2023** through performance optimization and weight reduction

ABBC (Sustainable Real Estate Startup) Hagerstown, MD
Co-Founder October 2023 - August 2025

- Dedicated to green construction and sustainable building design.

National Gallery for America's Young Inventors Akron, OH
Student Board of Directors September 2022 - June 2025

- Judged and selected six top young inventors for induction based on entries' usefulness, benefit to society, practicality, feasibility, cost effectiveness, and marketability.

PROJECTS + LEADERSHIP

Low-Cost Modular Biodiversity Sensing Module (in progress) | September 2025 - Berkeley, CA

- Developing **solar-powered wildlife sensing nodes** with camera, acoustic, and thermal inputs; lead on **embedded hardware + CAD module design** (FreeCAD, RPi)
- Engineering **low-power system architecture** and integrating **Wi-Fi HaLow telemetry** for convenient, remote data sync
- Collaborating cross-functionally on **AI/ML species ID pipeline** for autonomous biodiversity classification

Fully Automated Aquaponics System | December 2023 - June 2025 Exeter, NH

- Built **compact, closed-loop, automated aquaponics system** with real-time pH, ammonia, and temp sensing; designed unit in **Onshape** with integrated biofiltration and automated controls
- Acquired iterative feedback from **national/international experts (UNH, Victory Aquaponics, Island School (Bahamas))**; led cross-functional ops with faculty/staff to deploy system as live food + edtech solution

Innovation Towards the Future (NGO) Potomac, MD
Founder & President September 2020 - June 2025

- Founded global youth NGO **admitted to the UNFCCC** (UN Framework Convention on Climate Change)
- Forged **3 corporate partnerships** to distribute eco-friendly bags/cups to communities in need
- Launched and promoted **global No Single-Use Plastic Campaign** through national and international network connections

The 28th United Nations Climate Change Conference (COP28) + 18th Conference of Youth (COY18) Dubai, UAE
US Delegate & Global Youth Advocate November 2023 - December 2023

- Led my NGO to **represent the USA** at the **largest global climate conference**, chosen from 5k applicant NGOs
- Participated in formal global climate negotiations, policy formulation, panel discussions, and cultural exhibitions
- Championed youth-driven tech solutions to meet 2030 sustainability targets (renewables, efficiency, divestment)

Interests: Bassoon (international award winner), Tennis Captain, Rock Climbing, Latin/Greek, Personal Development Books, Anime