

Aias Tatsis

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EDUCATION

Harvard University

Bachelor of Science In Electrical Engineering

Cambridge, MA

Expected May 2029

- Activities: Harvard Rocket Propulsion Club (Avionics & Control Systems), Harvard Robotics Club

Pythagoreio Geniko Lykeio

Valedictorian, GPA 19.6/20, EUCYS 3rd Place, Vodafone Generation Next 1st, National Physics 3rd Prize

Samos, Greece

Sep 2022 – Jun 2025

- Awards: Aristotle Physics Excellence Award (2022, 2023), Oracle Red Bull Racing Award, Inventive Students 1st Place

WORK EXPERIENCE

Acaysia

Co-Founder & Technical Lead

Cambridge, MA

Sep 2024 – Present

- Built adaptive ML control algorithms for continuous-flow chemical reactors to autonomously optimize reaction yield, thermal efficiency, and energy utilization. Developed a digital-twin simulation framework integrating thermodynamic models, sensor feedback, and reinforcement learning controllers for real-time process optimization
- Implemented hardware-in-the-loop reactor control systems using Jetson Orin Nano and AtMega microcontrollers, achieving 35% reduction in oscillatory instability under dynamic load conditions.

PiForce – Aramco F1 in Schools World Finals Team

Team Leader, Mechanical & Software Engineer

Dammam, Saudi Arabia

Nov 2020 – Nov 2024

- Led a 5-member national champion team representing Greece at the F1 in Schools World Finals, to win the Oracle Red Bull Racing Achievement Award, developing a F1 miniature vehicle and custom 4-axis CNC for precision manufacturing.
- Engineered aerodynamic surfaces through CFD and wind-tunnel testing, achieving a 17% drag reduction over baseline design featured at Ansys case-study. Developed a full-scale Scientific Simulator for virtual testing and data acquisition; integrated MATLAB-based motion prediction and control optimization.
- Secured €24,000+ in sponsorships (PWC, Hellenic Petroleum Energy, Ansys) and managed project logistics, manufacturing, and judging presentations across engineering and enterprise categories.

LEADERSHIP & ACTIVITIES

Robotics Outreach – 1st Experimental High School of Samos

Instructor & Program Coordinator

Samos, Greece

Sep 2023 – Jul 2024

- Taught robotics and coding to 30+ students (ages 12–15) for eight months where no formal STEM courses were offered
- Designed and 3D-printed custom components, mentored student teams to develop autonomous robots for local competitions

Hellenic Mathematical Society – Mathematics Summer School

Instructor, “Fractals & 3D Printing” Course

Athens, Greece

Jul 2024-25

- Created and taught an interactive course introducing fractal geometry through Python and 3D printing to 100+ middle school students
- Voted *Best Course of the Summer School* by participants for engagement and creativity in connecting math to real-world design

PUBLICATIONS & HONORS

- Development and Evaluation of a Hybrid Solar–Thermoelectric Power Generation System in a Marine Environment — European Journal of Mechanical Engineering Research (2025)
- A Novel First Response Search and Rescue System — Journal of Student Research (2024)
- 3rd Place, EUCYS 2023 – European Union Contest for Young Scientists (€3,500 Prize)
- 1st Place, Vodafone Generation Next 2024 – Cycloid IoT UAV Medical Support System
- Gold Award, FIRST Global Challenge 2022 – National Robotics Team of Greece at World Finals in Geneva

SKILLS & INTERESTS

Skills: Python (Advanced, MIT BWSI Certificate), C++ (Intermediate), MATLAB (Control Systems & Simulation), SolidWorks (CSWP Certified), CFD & FEA (ANSYS, Autodesk CFD), ROS & Embedded (Arduino, STM32, Jetson), TF & PyTorch, 3D CAD & CNC Fabrication, Electronics Design, IoT Integration

Interests: Electric Guitar, 3D Printing, Robotics, Chess, Flight Simulation

Languages: Greek (Native/Bilingual), English (Full Professional Proficiency), French (Limited Working), German (Basic)