

WILLIAM ALEXAKIS

Athens, Greece

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EDUCATION

St. Catherine's British School Athens, Greece
International Baccalaureate Diploma Programme (Expected) September 2026 — July 2028
Computer Science HL, Mathematics Analysis & Approaches HL, Physics HL

IGCSE Programme September 2024 — July 2026
Computer Science (Grade 9), Mathematics Extended, Physics Triple Award

TECHNICAL SKILLS

C, C++, Python, Git, Linux/Unix

PROJECTS

Phase | Bytecode-Interpreted Programming Language August 2025 — December 2025
github.com/williamalexakis/phase
williamalexakis.com/writing-phase

- Designed and wrote a statically-typed programming language in C supporting functions, conditionals, loops, tuple destructuring, 5 primitive types, and a 25-opcode stack-based virtual machine (~4,800 LOC; no external dependencies).
- Engineered a full compilation pipeline featuring a handwritten lexer, recursive-descent parser, static type checker, bytecode generator, and a stack-based virtual machine executor with scoped call frames.
- Implemented 21 error types with source-mapped diagnostics displaying exact file/line/column, visual markers, and diff-style fix suggestions.

ACHIEVEMENTS & AWARDS

- Completed GCSE Computer Science one year early with Grade 9
- 1st Place in Line Robot Competition at StCatsHacks for 3 consecutive years (2023 — 2025) as lead programmer

EXTRACURRICULAR ACTIVITIES

Thaton Motorsport | STEM Racing/F1 in Schools Team October 2025 — Present
Software Engineering Member

- Wrote Python script to compute uncertainty metrics (standard deviation, range, variation coefficient) from CFD simulation data and generate visualizations for aerodynamic optimizations.
- Built and deployed team website using HTML/CSS and Cloudflare Pages.

Initiative for Revision of AI Usage Policy | Student-Led Initiative March 2026 — April 2026
Initiative Lead

- Led an initiative to revise the school's firewall restrictions on generative AI platforms, citing IBO, UNESCO, and WEF policy frameworks, prompting Senior Leadership to begin reviewing a dedicated network for ~200+ IB students with expanded AI access.
- Gathered ~140 student signatures and 6 formal endorsements from staff members including departmental heads and the Deputy Head of Upper School through direct outreach and cold approaches.
- Engaged directly with the Head of Digital Innovations (Senior Leadership Team) through meetings and discussions, leading to an active policy review for the 2026/2027 academic year.

ADDITIONAL INFORMATION

Languages: English, Greek

Interests: Philosophy of science, analytical writing, student leadership, skiing