MAX WAGNER

Cabot Mail Center #255, Cambridge, MA 02138

Email: maxwagner@college.harvard.edu | https://mwagner6.github.io/

Education

Harvard College

Cambridge, MA, Class of 2027

Concentration: Applied Mathematics (Computer Science). Pursuing Concurrent SM, Applied Math. Relevant Coursework: Probability (Stat110), Intro to Algorithms and their Limitations (CS1200), Applied Linear Algebra (AM120), Proof Based Multivariable Calculus and Linear Algebra (Math22a/b). Planned for Spring 2025: Differential Privacy (CS208), Data Structures and Algorithms (CS124), Ordinary and Partial Differential Equations (AM105). GPA 3.97 out of 4.0.

Activities: Club Hockey. Harvard Undergraduate Data Analytics Group, Associate Case Team Analyst for client companies, as well as work on the sourcing team. Cabot House Committee Intramural Sports Chair.

Belmont Hill School

Belmont, MA, Class of 2023

National Merit Finalist. School prizes in Debate, Biology, Chemistry, Physics, Mathematics. Earned 5 on all AP Exams taken: Computer Science A, Calculus BC, U.S. History, Biology, Chemistry, Physics C: Mechanics. Summer coursework (CTY, MathILy-Er) in game theory, graph theory, and other advanced topics in mathematics.

Employment

Decipad

Software Engineering Intern, May 2024-Dec 2025

Built infrastructure using Rust WebAssembly (WASM) to accelerate big data ingestion and processing for a web-based data notebook product. Constructed a robust and flexible type system in Rust WASM to interface with TypeScript code and seamlessly transfer data and accelerate data processing. Worked on production code to scale performance.

Cellino Biotech, Inc.

Engineering Intern, May - August 2023

Built image/video processing pipelines and automated fluidic systems to quantify flow profiles through enclosed cell growth chambers. Extensive algorithm development and use of Python for instrument control, accurate data collection, large-scale data processing, and display. Helped integrate imaging system with automated pipetting setup to collect and process data.

Dec 2024 project to create a high-rate, hot-swappable, and easy to use cell confluence quantifier

Brigham and Women's Hospital, Medical Biodynamics Program

Research Assistant, May 2022-April 2023

Research Trainee, June 2021-April 2022

Studied sleep disorders and the effects of Alzheimer's on sleep patterns using MATLAB and JMP data analysis. Attended SLEEP 2022 Conference in Charlotte, NC in June 2022, earning Trainee Merit Award. Runner-up, Harvard Medical School Sleep and Health Benefit Poster Presentation in October 2022. Author on one review paper on the use of actigraphy in cohort-based studies.

<u>Skills</u>: Python (Data analytics & visualization, image and video processing, optimization), Rust (runtime optimization, WebAssembly, robust type systems), WASM, TypeScript, Arduino, MATLAB, JMP.