Dustin Burda

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EDUCATION

Georgia Institute of Technology

M.S. Computer Science

2025 - Present

University of Chicago

B.A. Mathematics, Computer Science (Minor)

2018-2022

TECHNICAL SKILLS

Programming Languages: C++, Javascript, Python **Frameworks and Libraries:** Node, React, Express, Flask

Tools: Git, Linux, PostgreSQL, CMake, Google Test, Docker, AWS (EC2, S3, RDS, Dynamo)

WORK EXPERIENCE

Software Engineer

Investortools 06 2024 - Present

- Refactored custom storage engine to use file-backed mutexes in C++
- Debugged multi-process webserver to enhance log file trimming by 90%
- Built features for in-house version control system including persisting commit messages and diffing
- Enhanced UI to report disk usage, load times for web pages using C++, Javascript, and HTML template engine
- Implemented authorization using SHA-256 and logging external API calls for in-house query language

Software Engineer Intern

Discern 04 2024 - 05 2024

- Maintained and extended the functionality of RESTful API endpoints in Python and Django
- Traced through PostgreSQL queries and API endpoints using Postman, debugging back-end and UI
- Wrote front-end E2E tests using Microsoft Playwright
- Created Python scripts to modify application configurations and database tables
- Worked in Agile driven team, following biweekly sprints, milestones, issues, etc.

PROJECTS/OPEN SOURCE

PostHog (Open-Source)

Typescript, React, Python

- Designed a physically based path-tracer in C++ from scratch
- Built a linear algebra library supporting matrix and vector operations
- Wrote dozens of unit tests using Google Test in C++

WhittedRTC

C++, Google Test, AWS EC2, Github Actions CI/CD

- Designed a physically based path-tracer in C++ from scratch
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PhotoBooth

Go, PostgreSQL, HTML, Tailwind CSS, Typescript, Docker

- Developed a functional programming language interpreter in C++ with control flow, functions and recursion
- Made interactive REPL and script file execution modes
- Used modern C++ features including auto, smart pointers, lambdas, STL containers, and std::regex

AWARDS AND CERTIFICATES

AWS Cloud Practitioner 2025