

# Wolf Mermelstein

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## EDUCATION

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### Case Western Reserve University

B.S. Computer Science, Minor in Math & Finance, Cum Laude, 3.9 GPA

August, 2023 – May 2026

Cleveland, OH

- **Courses** OS, Compilers, Networks, Algo/Data Structures
- **Experience** [Veale Snyder Fellow](#), [Linux Club Co-President](#), Case Western ThinkBox Student Project Fund @ \$630 ([blog](#)), Software Craftsmanship TAing

### Bard Early College

Associate of Arts, 4.00 GPA

September, 2021 – June, 2023

Queens, NY

## AWARDS & HONORS

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HackCWRU (University Hackathon) First Place ([project blog](#))

February 2024

Microsoft Bug Hunter Acknowledgment ([writeup blog](#))

March 2022

## EXPERIENCE

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### Software Engineer

[Macro](#)

Open-source, keyboard-shortcut infused productivity platform unifying notes, tasks, and messaging, built in Rust and SolidJS.

June 2026 – Present

NYC

### Fullstack Software Engineer

[Val Town](#) Easy, fun, & instant serverless JavaScript functions-as-a-service platform.

May 2025 – May 2026

NYC

- Designed and wrote CLI companion ([blog](#), [code](#)) to author Vals locally, with atomic bidirectional syncing.
- Integrated [Deno](#) (TS) language server into Codemirror web editor ([blog](#), [code](#)) with Cloudflare Containers ([talk](#)).
- Helped architect and implement custom K8s load balancing system ([blog](#)).

### Participant

[Recurse Center](#) Brooklyn-based self-led coding retreat

June 2023 – August 2024

NYC

- Learned [Nix](#) and [contributed](#) packages to [nixpkgs](#). Working on project to dockerize Android emulators with Nix docker tools ([blog](#), [code](#)).
- Created Python Django server to merge Webster, OpenAI, and other API data into elegant English Vocab flashcard PDFs; rendered templated SVGs via CDP. ([blog](#), [code](#))

### Co-founder; Solo Software Engineer; Sales Manager

Minecraft Name Autoclaiming Online self-run business

June 2021 – July 2022

Remote

- Developed system to autoclaim desirable Minecraft usernames at moment of release. Automated server deployment and account distribution for 50-80 accounts/servers with custom admin interfaces. ([blog](#), [code](#))
- Managed auctions and sales for 100+ buyers, generating \$6,000+ in revenue with 200+ unique accounts sold. Maintained consistent positive customer feedback & regular reorders.

## PROJECTS

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### DNA Nanotube Designer Tool ([blog](#), [demo](#), [overview](#), [code](#))

DNA nanotechnology academic research project. Developed interactive PyQt desktop app to streamline geometrically constrained DNA nanotube design. Collaborated w/bionanotechnologist to create algorithms like determining helix strand switch behavior on junction clicks.

### MDvalidate ([blog](#), [code](#))

CLI tool to validate the *shape* of arbitrary Markdown and extract data from it using a custom schema language that aesthetically *resembles* the Markdown it validates. Designed schema language and custom AST zipper tree algorithm with streaming support for incomplete trees. Built with [Rust](#) and [Treesitter](#).

## SKILLS

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- **Languages:** TypeScript/JavaScript, Nix, Rust, Go, Python, Bash, Java, Lua, C/C++, Scheme/Racket, (postgre)SQL, HTML & CSS, Markdown & LaTeX, Typst
- **Tools:** Nix & NixOS, Linux, Web frameworks (React, Next, React-router, Tailwind, Prisma/Drizzle, Remark/rehype, etc), Python frameworks (numpy, pandas, django, PyQt/PyQtGraph, etc), database systems (Postgres, Clickhouse, Redis/valkey), General devtools (Git, github workflows, GNU, [Yazi](#) etc), AWS (s3, ec2, etc), real-time networking WebAPIs (WebSockets, WebRTC, etc) ([demo](#)), Vim wizard :)

Built with Nix; Source on GitHub