Wolf Mermelstein

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EDUCATION

Case Western Reserve University

Cleveland, OH

Relevant courses: Data Structures, Logic Design, Persuasion, Linux Tools/Scripting

Anticipated 2027

Experience: Tabletop Empire (board game club) Vice President, Student Gov. IT Working Group member

• Bard Early College

Queens, NY

Sep. 2021 - June 2023

Awards & Honors

Veale Snyder Fellow

Associates of Arts; 4.00 GPA

August 2024

HackCWRU (University Hackathon) First Place

February 2024

Case Western ThinkBox Student Project Fund (\$630)

October 2023

Bard High School Early College Departmental Nanoscience and Ancient Latin awards

May 2023

Microsoft Bug Hunter Acknowledgment

March 2022

Hackett Certificate for "greatest proficiency in oratory, either verse or prose"

May 2022

EXPERIENCE

• Recurse Center

Brooklyn-based self-led coding retreat

Participant

June 2023 - August 2023; June 2024 - August 2024

- o Personal Website: Designed website with TS/TSX, React, & tailwind. Implemented custom post editing system with Postgresql, Prisma ORM, and AWS S3 to store/fetch/render posts. Wrote backup and migration scripts in TS. Created special markdown parsing system with custom Rehype plugins. Wrote Obsidian plugin to sync/edit blogs.
- NixOS & Nix Builds: Configured NixOS desktop system from scratch w/Hyprland, home-manager, and other extensive customizations. Learned Nix language/how to package binaries and apps of various kinds. Working on project to package Android emulators with Nix and stream over WebRTC.
- o Generated Vocab Cards: Created Python Django server merge data obtained through Webster, OpenAI, and other APIs into elegant, contained English Vocab flashcard PDFs. Created system to generate vector art utilizing templated SVGs and Chrome Devtools Protocol.
- Brooklyn Robot Foundry

Robotics afterschool & summer camp franchise

July 2020 - June 2023

- Design Team Member; Teacher o Design system overhaul: Crafted dynamic presentation templates and inventory management systems for designers & teachers, improving robot kit creation process. Educated staff on how to use the new materials.
 - o Curriculum Design: Developed novel 'inventors' curriculum fostering open-ended exploration, with 40+ unique lessons, taught to 10-12 year olds throughout the country & created content for astronomy 'Science Lab' course with thorough, interactive lessons for 6-9 year olds.
 - Teaching: Lead-taught virtual robot-building summer classes to groups of 5-12 8-13 year olds. Co-taught in person classes and robot birthdays. Helped run extended day sessions.
- Minecraft Name Autoclaiming

Online self-run business

Co-founder; Solo Software Engineer; Sales Manager

June 2021 - July 2022

- o Systems Design: Developed software in Python to autoclaim desirable Minecraft usernames at the moment of release, beating competitors by milliseconds. Automated server deployment and account distribution for 50-80 accounts.
- Sales Management: Facilitated sales process and auctions for over 100 buyers, generating \$6,000+ in revenue with around 200 unique accounts sold. Maintained consistently positive customer feedback and regular reorders.
- Software Engineer: Implemented automatic name queue, contrived server-setup Python scripts, coded AioHTTP Swagger-Spec'ed management server, and created interactive Discord bots. Utilized Vultr's API for automated server deployment and AsyncSSH for auth & SFTP.

Projects

- DNA Nanotube Designer Tool ("NATuG"): DNA nanotechnology academic research project. Developed interactive PY-qt desktop app to streamline the geometrically constrained DNA nanotube design process. ngaged Collaborated w/bionanotechnologist to design important algorithms such computing DNA helix strand switch behavior on junction clicks. Engineered custom export file format. Currently working on scholarly paper. For more see my website post, or Github.
- Andoird Event App: Android event planning application. Includes a MongoDB database and customized login system, and various event displays. Implemented a commenting system and event map views. Learned about Android CLI tool ecosystem and emulators.

SKILLS

- Languages: Fluent English & Ancient Latin learner. Python, Typescript, Javascript, Java, Bash, Nix, HTML & CSS, Markdown & LaTeX, Typst, Lua, Awk, learning Verilog
- Tools: Nix & NixOS, Linux, React, Tailwind, Mui, Docker, NextJS & NextAuth, Numpy & Pandas, Prisma, Django, PyQt & PyQtGraph, Asyncio, Unified/Remark & Rehype, Git, S3, AWS, Fusion 360, Janus Gateway & WebRTC, Adobe Illustrator & Photoshop, GSuit & MS Office, Vim, JQ, CLI tooling
- Miscellaneous: Object-oriented, functional, Web development, 110+ WPM Typing, CPR Certified (2022)
- Qualities: Fast learner, Creative thinker, Debugging, Efficient, Good Communicator, Reliable & timely