Mat[idza] Manna Muthambi

an aspiring engineer focused on open protocols, embedded systems, and rapid prototyping

https://matmanna.dev

Summary

A decade of technical experience has shaped me into an indie maker who builds engaging, accessible, and secure tools for humans. I am especially passionate about search UX, real world interfaces, and decentralized infra. Outside of computing, I'm also a guitarist, avid competitor, and linguaphile.

Profiles

Site	GitHub	LinkedIn	DevPost
matmanna.dev	matmanna	in/matmanna	matmanna

Interests

Rapid Prototyping	Accessiblity	Open Protocols	Embedded Systems	Secure UX Design	Consumer Rights
ship-early, agile	a11y, i18n	git, atproto, nix, protobuf	plc, rpi, hid	data ux, gamification	reverse engineering

Projects

LtAmp.py Jun 2025 – Present
A cross-platform Python module for interfacing with Fender LT electric/bass guitar amps.

Operation: Falcon Nation
A life-sized (6ft), interactive installation supporting community STEM outreach w/ industrial PLC technology

Slacker News
Maintainer of Hack Club's official news (35k+ visits), dserving and informing a community of 100k+

PSUx
An everything app for Penn State; dining menus, impromptu meetings, course scheduling, mapping, and more

The Twist LT
Guitar amp augmentation device with remote control and preset playlists

Marmalade
A permissionful api access & admin layer for Jelly (1000s of support tickets)

Bunker
Internal tooling (attendance, logistics, and treasury) for Builder's Collective

Draw a Dino & #ship
Maintained Hack Club's interactive workshop & forum for 50k teens

Experience

The Hack Foundation

Software Engineer — Sept '26 - Present

- Transitioned from volunteer maintainer to a role as a Lead Engineer responsible for maintaining information infrastructure serving a community of 100,000+ teens
- Lead maintainer of ◦ Slacker News (~35k visitors and 50+ contributors and in 4 months), ◦ the #news Slack channel (~10k members), ◦ Indigest (bridge-based CMS), etc.

Past roles: • Volunteer Support Engineer • Open-source Project Lead • Fraud Analyst • Security Researcher — Nov 2025 – Present

Various Clients — Mar '25 - Aug '26

As an intern, independently ran AV (videos, cameras, mixers) for high-stakes concerts, funerals, weddings

Open Source Maintainer

Published open-source software, hardware, and games for personal, entrepreneurial, and competitive pursuits (including 15+ hackathons, jams, and conventions)

Education

PSU Schreyer Honors College — Thesis-based BS
Computer Science — State College, PA • Present
Courses: • Rhetoric and Civic Life, • Linear Algebra, • Prog & Comp Fundamentals, • Spanish Linguistics, • Physics Electricity & Magnetism, *next:* • Engineering Leadership, • Data Structs & Algos, • Comp and Society, • Discrete Mathematics

Lower Dauphin High School — Diploma
Dual Enrollment — Hummelstown, PA • Aug '22 - Jun '26
4.0 GPA *(top 3%)* | **SAT 1510** | **AP Calc 5** | **AP Lang 5** | **AP Lit 5** | **AP Phys 5** | **AP Mech 5** Courses: • **Intro to Python** @ MITx: *99%* • **Java I-II** @ UCSDx: *A+*, **& Python II-III & DSA** @ UCSDx: *A*, • **Intro to Stats** @ BerkeleyExt: *A*, • **Calc II-III** @ HACC: *B*

Awards & Certifications

1st - PLCNext Innovation '25
Won Phoenix Contact's nationals 1st for "O:FN" w/ the LD Nano Team.

1st - PA Invention Convention '26
Led market-minded team pitches and "O:FN" to state & local victories.

Hack Club YSWS
Earned ~$1k in grants from 1200+ hours on shipped personal projects

2nd - SteelHacks Out Loud! '26
App-free budgeting for seniors, families, & proactive financial security

1st x2 - LA Hacks AI VISA & Photon '26

Airtable Admin Certification

Congressional OSS Certification

Falcon Integrity Award

Organizations

Builders Collective @ PSU	LD Nano Team	Sociedad Honoraria Hispánica	Mu Alpha Theta	National Honor Society
Engineering & Treasurer	Programming Lead -> Captain	Treasurer - raised & spent ~$2k	Competition Participant	120+ Volunteer Hours

Press & Media

FOX 43 Interview | HC Magazine '26 | FBC Weekly '26 | The Sun '25 | Control Design '25 | Brain Busters '24

Languages

English	Spanish	Esperanto	Typescript	Rust	Ruby on Rails
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