

# Aravinth T M

STUDENT DEVELOPER, FREE SOFTWARE ACTIVIST

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## Skills

<b>Languages</b>	Rust, Python, JavaScript, TypeScript, Java, Bash
<b>Technologies</b>	Actix Web, WebAssembly, Django, React.js, Docker, PostgreSQL, SASS, Redis, Open API, Nginx, GraphQL, OAuth, JSON-RPC, Hyperledger Fabric
<b>DevOps</b>	Docker, Designing micro-services, Github Actions, Travis CI
<b>Engineering</b>	test-driven development, version control workflow, code review, systems designing
<b>General skills</b>	Rapid learning, time management, team management, Linux Knowledge

## Education

### VIT AP University

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 6.83/10.00

Near Vijayawada - 522237, Andhra Pradesh, IN  
present

## Experience

### mCaptcha

FOUNDER CEO

- Design and develop high-performance, horizontally scalable backend: Rust, Actix-Web, Postgres, Redis
- Design and develop high-performance, lightweight, server-side rendered frontend: Sailfish, TypeScript, SASS
- Design and develop custom native Redis module
- Documentation
- Deployment and distribution

[Homepage](#)

March 2021 - PRESENT

### batsense.net: self-hosted, privacy focused indie webbing

OWNER WEBMASTER

- Search engine
- Secure chat platform
- Tor node
- See legend for full list of services: <https://batsense.net/services>

[Services](#)

2019 - PRESENT

### Actix Web

CONTRIBUTOR

- Documentation: migrated the project to intra-doc links
- Code recipes

[Project Code Base](#)

November 2020 - PRESENT

### Null (InfoSec) Chapter

TECH LEAD

- Designed and built a Capture The Flag event for freshmen introduction event in under two weeks(Source Code)
- Webmaster

[VIT AP, AP](#)

October 2020 - PRESENT

### Actix Web

CONTRIBUTOR

- Documentation: migrated the project to intra-doc links
- Code recipes

[Project Code Base](#)

November 2020 - PRESENT

## Projects

### Actix Web Ecosystem libraries

DEVELOPER

- Cache Buster: caching library written in rust
- Actix Stateful Sessions: Redis based opaque session implementation

[Collection](#)

2021

## Redis Leaky Bucket native module

[Source Code](#)

DEVELOPER

June 2021

- active leak
- supports cluster mode
- supports persistence through RDB
- High performance(see project's README)
- all subroutines are tested

## Damn Vulnerable Blockchain

[Source Code](#)

DEVELOPER

January 2021

- vulnerable by design(attack scenario detailed in project's readme)
- p2p blockchain implementation
- in-built peer discovery service
- Proof of Stake with coinage
- client library
- 88% code coverage (as of January 17, 2021)

## Wagon

[Source Code](#)

DEVELOPER

November, 2020 - present

- High performance membership management platform
- Free Software alternative to EventBrite
- Follows the 12 Factor App recommendation
- 91% code coverage (as of December 14, 2020)

## Identity

[Source Code](#)

DEVELOPER

August 2020 - present

- Identity and access management platform built for the IndieWeb
- OpenID Connect based
- Uses OAuth2.0 for third-party integration
- Uses novel actor model based, proof-of-work DoS protection mechanism
- Follows the 12 Factor App recommendation
- 70% code coverage (as of December 14, 2020)
- Performant, built with Rust

## Hackers Union CTF

[Source Code](#)

DEVELOPER

Oct 2020

- High performance CTF platform
- real time scorecard

## IDS Matrix

[Source Code](#)

DEVELOPER

June 2020

- Light weight Intrusion Detection System for GNU/Linux Systems
- Built on top of Matrix(a decentralised messaging service)

## Porting postmarketOS to Samsung Galaxy Tab E 9.6(SM-T561)(samsung-gtle36)

[Home Page](#)

DEVELOPER AND OFFICIAL MAINTAINER

July 2020

- Uses upstream Linux kernel
- Display and WiFi works

## Yify Torrents Wrapper

[Source Code](#)

DEVELOPER

June 2020

- NOTE: I don't support piracy, this is a project that I built for fun
- Fetches data from Yify Torrents
- Schedules jobs on server for downloads
- Updates inventory
- Provides an interface to stream content

## Tracking

[Source Code](#)

DEVELOPER

August 2019- January 2020

- IoT-based, cheap three-dimensional indoor positioning system
- Visual Range accuracy
- Easy deployment, uses existing infrastructure(WiFi) routers