P K NAVIN SHRINIVAS

+91 8217703098 ◇ Bengaluru, India

karupal2002@gmail.com ◇ linkedin ◇ github ◇ website

EDUCATION

B.tech in Computer Science Engineering, PES University — CGPA: 8.79 — May 2024
4 time MRD scholarship (top 20% in batch)

WORK HISTORY

Technology analyst Summer intern at **Morgan Stanley** — May 2023 - July 2023

- Worked with **Apache solr** and **lucene** to build a fast and responsive data dashboard, along with **API for an internal playground**. Secured by auth systems like siteminder and SPENGO.
- Was responsible for deployments to QA and writing unit tests.

Technology Intern at **Target Corporation (US Retail).** — January 2024 - Present

- Worked with Elasticsearch, postgres, springboot, internal design systems and React.
- **Delivered a new platform for the management of indirect items** and their attributes conforming with internally used systems and an **MFE architecture**

SWE-1 at **Morgan Stanley** — August 2024 - Present

- Underwent the Global TAP training.

PUBLICATIONS AND RESEARCH

- ICBDA2024 - Presented a paper on **Techniques used in time series databases and their internals** and won the **best presenters award**! — publication — conference

FOSS CONTRIBUTIONS

- **Hyperswitch — Juspay**: fix a pagination bug causing issues in fronted and more PR Link — PR Link 2
- Kanidm — restrict Unix PW binds on LDAP — PR Link
- **Jaeger (CNCF graduated)** — Allow uploading of OTLP traces (new-feature) UI PR — Backend PR

PROJECTS

GRDNS Golang, dnsperf, redis, bash, docker — **A Concurrent DNS caching server** — GitHub

- Created a DNS caching server program to accomplish fast resolve times and high availability.
- Uses Redis and in-memory key-value pairs that increase resolve times by many folds.
- Utilises fastdns and UDP libraries for parsing DNS packets and network.

sapling Rust, Linux, SSG, markdown, jinja, Unix — **A static site generator from scratch** — GitHub

- An in-house built alternative of 11ty!
- A static site generator, written entirely in rust.
- Implemented near real-time live reload helpful for dev environments.
- Deep data merge with 2 types of indices.

PerfTest C/C++, Vcpkg, Pthreads — **A Unix stress tester and performance tester** — GitHub

- Created performance/stress stresses to make systems testing easier.
- Uses libraries found natively *NIX systems.
- Utilises pthreads library for multi-threading.

COMMUNITY ACTIVITIES AND TALK

- **Fostered open source** by organising HackNight 3.0 (A spin-off of hacktober fest). Also presented at Rust India and FOSSUnited.

- Provided a stepping stone for beginners into open source by conducting a **git workshop** as part of ACM PESUECC. Also Conducted unique **workshop on topics on Concurrency, Linux and Rust** as part of HackerSpace PESUECC

- Gave a talk on PupBin (Self hosted PasteBin) and **ORMs** in Rust as the **Rust Bangalore** circuit.

- held leadership position as **mentor/tech team lead** and Hackerspace PESUECC and served as secretary at ACM PESUECC