Pratham Patel

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Experience

Ola Krutrim

Software Engineering Intern (remote) | Oct 2023 - Present

My work at Ola Krutrim revolves around the preparation of our upcoming **RISC-V servers**. As a result, I make sure that the software stack from the Kernel and above (user-facing) works as needed.

- The **x86_64 to RISC-V binary transpiler** is the continuation of my work at Bodhi Computing due to the acquisition.
- Hands-on experience with writing a **custom Linux kernel scheduler**. This was achieved with the help of `sched_ext`, an **eBPF** feature, using which I wrote a scheduler for internal purposes.

Bodhi Computing

Software Engineering Intern (remote) | Aug 2023

Bodhi Computing was created to collaborate on software for Tenstorrent's hardware. As a result, I was tasked to work on an **x86_64 to RISC-V binary transpiler**. Nothing such existed prior so it was a from-scratch project. I relied heavily on **Rust-lang's robust type system and strict checking** to ensure that my instruction mappings were always correct. I learnt a lot about methodologies of writing software, in a practical sense. *Bodhi Computing was later acquired by Ola Krutrim*.

Rocky Enterprise Software Foundation (RESF)

RESF Member | May 2023 - Present

Rocky Linux is one of the spiritual successors to CentOS, powered by its community. As an RESF Member, I ensure that Rocky Linux is as robust and seamless to use as possible. I mostly tend to the following duties:

- Supporting ARM hardware that Red Hat has not certified for RHEL
- Testing Rocky Linux' releases

It's FOSS

Technical Writer (freelance) | Oct 2021 - Present

At It's FOSS, I cover **Kernel-adjacent topics**, **programming tutorials** and **howtos** on using some free and open source software. A brief overview of topics I have covered:

- <u>Compiling the Linux kernel, a guide for beginners</u>
- Attaching UART to your Raspberry Pi for debugging purposes
- <u>Micro-course on the Rust language</u>
- Few tutorials on Red Hat's Podman

Skills

Rust, C, Python, Git, Linux Kernel, ARM, RISC-V, RHEL, Nix, Ubuntu, Debian, Docker, Podman

Education

ITM BU B.Tech in CSE-AI | June 2021 - June 2024 (*expected*)

Sigma Institute of Technology and Engineering Diploma in CSE | June 2018 - June 2021 100% tuition fee waived by the Govt. of Gujarat due to my excellent academic performance.