

AVINAL KUMAR

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EDUCATION

National Institute of Technology, Hamirpur

Bachelor of Technology in Computer Science and Engineering: CGPA: 8.45 / 10

Himachal Pradesh, India

Jul 2018 - Present

WORK EXPERIENCE

Red Hat

DevTools Intern

Bengaluru (Remote)

Jan 2022 - Present

- ❖ Designed and implemented Minimal Tekton Server along with unit tests, a training project that creates Tekton resources on Kubernetes/OpenShift cluster using Tekton API. It was developed using Golang, Kubernetes, TektonCD and Redis and had 3 parts, MKS Server, MKS CLI and MKS Dashboard.
- ❖ Currently contributing to Tekton Results as part of the Pipelines Service team. Tekton Results aims at long term efficient results storage of Tekton PipelineRuns and TaskRuns.

Apache APISIX - API7.ai [GitHub](#)

Technical Writer

Beijing (Remote)

Feb 2022 - Present

- ❖ Redesigning developer and user documentation of Apache APISIX project. Creating Katacoda tutorials for APISIX. Collaborating with the community and integrating their feedback into documentation.

Google Summer of Code 2021 @ The FOSSology Project [GitHub](#)

DevOps and Software Development Engineer Intern

Remote

May 2021 - Aug 2021

- ❖ Upgraded the build system from Unix Makefiles to a more optimized and flexible CMake generator.
- ❖ Migrated the CI/CD of the project from Travis CI to GitHub Actions. This migration removes the dependency on a third-party CI, provides better build time and tighter integration with GitHub features.
- ❖ Refactored and fixed years-old unit and functional testing code written in C/C++ and PHP. Build time reduced to 5-7 minutes (twice as fast) and CI time reduced to 20-25 minutes from 1-2 hours.

Google Season of Docs 2020 @ VideoLAN [GitLab](#)

Technical Writer

Paris (Remote)

Sep 2020 - Nov 2020

- ❖ Documented VLC for Android app using Sphinx, reStructuredText, Markdown, and shell scripting.
- ❖ I achieved the goal of this project, which was to provide well-researched and user-friendly app documentation enriched with supporting screenshots and step-by-step tutorials.

PROJECTS

Minimal Tekton Server [GitHub](#)

- ❖ Minimal Tekton Server is a group of applications written in golang which listens for 'mks' custom resources being created and sends requests to Tekton APIs to create corresponding resources on a Kubernetes/OpenShift Cluster. It only takes a few required fields into consideration and provides options to customize them.

Automated WakaTime GitHub Actions App [GitHub](#)

- ❖ Built an automated WakaTime stat update system using Python script, shell script, Docker, WakaTime API, and GitHub Actions. Currently, it has 42 stars on GitHub and 170+ active users worldwide.
- ❖ This app generates a colorful bar graph of the coding activity tracked by WakaTime in last week, daily at a specified time in SVG format. This image file can then be embedded into README and websites.

Xeus-BASIC [GitHub](#)

- ❖ Built Jupyter Kernel for BASIC language using Xeus Framework, C, and C++. As of now, it can execute BASIC programs line by line in Jupyter Notebook and output its result.

OPEN SOURCE & CO-CURRICULAR

- ❖ Contributing to **KCP, FOSSology, Boostorg, ScanCode-Toolkit, Embox, GitHub, VideoLAN, WasmEdge, AntiMicroX, Apache APISIX** and many other open-source projects.
- ❖ **GitHub Campus Expert** (May 2021 - Present) - Managing open source communities and hosting webinars, workshops, and coding boot camps. Beta testing of upcoming GitHub features and tools.
- ❖ **President @ Computer Science Engineers' Community - NITH**: Conducted many coding workshops and webinars as part of NITH's departmental Computer Science Society.

SKILLS

Programming Languages: C++, Go, Java, C, Bash Scripting

Technologies: GNU/Linux, Git, CI/CD, CMake, Docker, Kubernetes, OpenShift, TektonCD, Fedora