Ishan Grover

EXPERIENCE

• Rust Developer • Aftershoot

September 2024 - Present

- Engineered and released **image retouching features** (Acne & Blemish Removal, Face Brightening, Object Removal, etc.) from inception to production, integrated directly into the AS app with **35,000+ active users**.
- Developed core functionality (40,000+ lines of code) in Rust using advanced image processing, EXIF manipulation, and libraries such as OpenCV, ndarray.
- Collaborated with cross-functional teams to ensure seamless integration and optimized performance of retouching workflows.
- Building a **command line interface (CLI)** to isolate retouching modules for streamlined QA and AI-driven testing.

• Google Summer of Code • CCExtractor | Project

May 2024 - August 2024

- Migrated and rewrote 10,000+ lines of legacy C code into Rust, eliminating unsafe patterns and improving memory safety.
- Created a **Docker image** simplifying usage of CCExtractor and eliminating environment setup hassles.
- Wrote unit tests and ran regression tests to stabilize existing C code.
- Worked extensively with Rust, C, bindgen, Docker, and testing frameworks.

• Rust Developer Intern • MakerStudio

April 2024 - August 2024

- Developed MonkMode, a focus app in Rust, interacting with DBus to manage notifications for a distraction-free environment.
- Contributed to PickGap, an analytics product that identifies market gaps through user feedback.
- Worked on FolderSet, an inventory management WebApp utilizing tokio, diesel, axum.

OPEN SOURCE CONTRIBUTION

CCExtractor

- Add timing module in lib-ccxr #1640
- Add net module in lib-ccxr $\#1\overline{634}$
- Add encoding module in lib-ccxr #1628
- Add bits and levenshtein module in lib-ccxr #1627
- Add time units module in lib-ccxr #1623
- Add log module in lib-ccxr #1622
- Initialize data structure for $\overline{\text{Rust CEA-708}}$ decoder #1618
- Create Unit test case for all rust modules #1615
- Create a Docker image for CCExtractor #1611
- Create AppImage for building CCExtractor in Linux #1592

• i3status-rust

- Refactor code to unify package manager blocks (apt, pacman, aur, dnf) into a single "packages" block. #1988
- Add xkbswitch support for keyboard layout. #1985

PROJECTS

- Pass-rs | Password Manager (Rust)
 - A secure and user-friendly **CLI password manager**.
 - Uses secure and safe cryptography algorithms like $\bf XChaCha20\text{-}Poly1305.$
 - Successfully **tested with 1000 password entries** for demonstrating speed and performance.
- LLM-Chat | Chat API (Rust, Axum)
 - Developed an **fast API** for generating response from local LLM.
 - Uses **OpenLLaMA 3B model** for generating fast response.

EDUCATION

• ABES Engineering College • B.Tech, Computer Science

2022 - 2026 · 8.5 CGPA:

• Kendriya Vidyalaya, UP · Intermediate (PCM)

2020 - 2022 · Percentage: 77%

• Kendriya Vidyalaya, UP • High School

2019 - 2020 · Percentage: 86%

TECHNICAL SKILLS

Languages: Rust \cdot C \cdot C++ \cdot Python

Familiar with: Golang · Haskell · BashScript · HTML · CSS · JavaScript

Developer Tools: Mac · Linux · Git · Docker · Postgres · NeoVim · Arch Linux · Tmux

Rust Crates Familiarity: tokio \cdot opency \cdot numpy \cdot axum \cdot bindgen \cdot actix \cdot sqlx \cdot diesel \cdot nom \cdot serde \cdot egui \cdot dbus

Skills: OOPs \cdot Operating System \cdot Computer Architecture \cdot Data Structures & Algorithm

Position of Responsibility