# Ishan Grover

#### EXPERIENCE

### • Rust Backend Developer Intern • Aftershoot

September 2024 - Current

- Built image retouching features in Rust including acne removal, object removal & etc tools from scratch.
- Implemented and integrated **image processing algorithms** in Rust, focusing on performance and memory safety.
- Worked closely with team to integrate Retouching components into the main Aftershoot software.

### • Google Summer of Code • CCExtractor | PROJECT

May 2024 - August 2024

- Migrated and rewrote parts of the existing C codebase to Rust for better security.
- Created a **Docker image** to simplify the usage of CCExtractor, eliminating environmental setup hastles.
- Fixed and tested the existing C code by writing unit tests and running regression tests.
- Worked with Rust, C, bindgen, Docker, testing

### • Rust Developer Intern • MakerStudio

April 2024 - August 2024

- Developed MonkMode, a focus app in Rust, interacting with DBus to manage notifications and create a distraction-free environment.
- Contributed to **PickGap**, a product that analyzes user feedback and topics to identify market gaps.
- Worked on **FolderSet**, a inventory management WebApp.
- Worked with Rust, Linux, dbus, diesel, tokio, actix, postgres

#### **OPEN SOURCE CONTRIBUTION**

#### CCExtractor

- Add timing module in lib-ccxr #1640
- Add net module in lib-ccxr #1634
- 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 Rust CEA-708 decoder #1618
- Create Unit test case for all rust modules #1615
- Create a Docker image for CCExtractor  $\#\overline{1611}$
- 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 XChaCha20-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%

 $\bullet$  Kendriya Vidyalaya, UP  $\cdot$  High School

2019 - 2020 · Percentage: 86%

# TECHNICAL SKILLS

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

Familiar with: Bash script  $\cdot$  Haskell  $\cdot$  HTML  $\cdot$  CSS  $\cdot$  JavaScript

**Developer Tools**: Linux  $\cdot$  Git  $\cdot$  Docker  $\cdot$  Postgres  $\cdot$  NeoVim  $\cdot$  Arch Linux  $\cdot$  Tmux

Rust Crates Familiarity:  $tokio \cdot bindgen \cdot actix \cdot axum \cdot sqlx \cdot diesel \cdot nom \cdot serde \cdot egui \cdot dbus$ Skills: OOPs · Operating System · Computer Architecture · Data Structures & Algorithm

Interest: Low level programming  $\cdot$  System programming  $\cdot$  Embedded systems

## Positions of Responsibility

### • Elixir Community • LEAD

Aug, 2023 - Present

- Elixir Community is a **coding community** which is actively organizing coding events and sessions within college.
- Organized various coding events having more than **500**+ **students** as audience.
- Engaged in organizing coding challenges, workshops, and sessions.