Book

Rakesh Venkat

2025-11-30

Table of contents

1 Overview

2 Documentation hub.

This site collects Technical Docs, Architecture Notes, and Design Decisions for all my projects.

3 How to Use This Site

- Use the **sidebar** or the project cards below to jump into a specific project.

- Within each project:
    - Start with the *Overview* chapter
    - Then read Architecture / Workflow chapters
    - Dive into Code Snippets, Testing, and Future Work as needed

This site is primarily written for **future me** — but if you're reading it later
as a user or contributor, I hope it gives you clear insight into how everything fits together

4 Roadmap & Future Projects

This hub is designed to grow over time as more tools , research, libraries experiments appear. Planned additions include:

- Experimental tools automation, research, quantum computing etc

- Libraries or platform to enhance productivity

- More utilities on workflows automation

When a new project is created, it will get:

- Its own folder (e.g. `new-project/`)

- Its own mini "book" of chapters

- A card on this page linking into its docs

5 About Me

I'm **Rakesh V**, a developer and tinkerer who enjoys building tools that make it easier to think, automate, and explore ideas.

I maintain the projects in this "book"

If you'd like to know more about my background, how these tools came about, and how to support my work, see:

Read more in "Author" section

6 Projects Overview

6.0.1 ratcrate-core

The **engine** behind the Ratatui ecosystem index.

- Scans the crates.io sparse index

- Finds all crates depending on `ratatui`

- Enriches them with crates.io metadata

- Applies smart caching

- Produces `ratcrate.json` for other tools to consume

- To be open sourced soon

Read the ratcrate-core docs »

6.0.2 ratcrate-cli

A command-line interface for exploring the Ratatui ecosystem.

- Reads `ratcrate.json` produced by `ratcrate-core`

- Search and filter Ratatui crates from the terminal

- Show stats, links, and crate details

Read the ratcrate-cli docs »

6.0.3   ratcrate-tui

A **Ratatui-based TUI** for browsing Ratatui crates.
Very meta. Very fun.

- Terminal UI built with Ratatui

- Interactive search and filters

- Crate detail views with stats and links

- Powered by `ratcrate-core` data

Read the ratcrate-tui docs »

6.0.4   doc2quarto

A helper tool for turning rough notes, markdown, or code comments into
structured Quarto documentation.

- Convert notes into `.qmd` skeletons

- Ideal for standardizing docs across all projects

Read the doc2quarto docs »

6.0.5   QBanner (Coming Soon)

A light-weight **rust based** library for CLI Banners

- Works on all rust cli projects and easy to use

- Supports Ratatui basic and advanced layouts

- Works on **shell scripts** too!

Read the Qbanner Libraryi docs »

6.0.6   QSwitch (Planned)

Coming Soon »

6.0.7   Challenges (Coming Soon)

Documenting common challenges during these projects

Coming Soon

6.0.8   Books I read (Coming Soon)

Coming Soon

6.0.9   neovim to emacs migration

Documenting my journey from neovim to emacs

Read my journey »

6.0.10

Coming Soon

7

Engineer who builds things.
See what could be, not just what is.
Build. Learn. Automate

8 About the Author

Hi, I'm **Rakesh Venkat** — a developer, researcher, and lifelong tinkerer who likes building tools that:

- Automate away repetitive work

- Make it easier to explore ideas

- Give people nicer ways to learn from and navigate code

Most of the projects in this book revolves around:

- **Rust** and terminal tools

- **Ratatui** TUIs (very meta)

- **Documentation** and knowledge organization

- Research & experiments that later become libraries or tools

I think of this book as a logbook of the systems I'm building and how they fit together.

8.1 What I'm Trying to Do With These Projects

The broader goals behind these tools:

- Build **high-leverage tools** that save time for other developers.

- Collect and organize knowledge (like the Ratatui ecosystem) so people don't have to rediscover the same things repeatedly.
- Treat documentation as a first-class artifact, not an afterthought.