![Image](assets/credits.png)

Active Maintainers/Creators
!!! warning ""

The project is maintained by two core developers who each own a unique layer of the system.

=== "Soham Metha"



{ width="120px"

style="border-radius: 50%;padding: 4px;" }

- > **Role**: Lead Developer
>
- > **Modules Owned**: VIREX VM, SASM Assembler, VS Code Extension, Docs

!!! tip "info"

- Designed the **VIREX** Virtual Machine architecture.
- Developed the **SASM Assembler** and complete instruction set.
- Built tooling: AST visualizer, debug tools, and VS Code syntax extension.
 - Authored all core documentation.
 - Maintains the monorepo, versioning, and long-term roadmap.

```
!!! quote

    *"VIREX is a hands-on way to explore systems programming, not just
study it."* <br>
[![](https://img.shields.io/badge/Language-C-blue)]
(https://en.wikipedia.org/wiki/C_(programming_language)) [![]
(https://img.shields.io/badge/Project-VIREX-success)]() [![]
(https://img.shields.io/badge/Project-SASM-success)]()
!!! quote ""
```

=== "Omkar Jagtap"



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```
> **Role**: Compiler Engineer - ORIN <br>
> **Modules Owned**: ORIN Compiler (WIP), Custom Hashtable
Implementation
!!! tip "info"
    - Designing and implementing **ORIN**, the high-level language
compiler targeting SASM
    - Handles the full compilation pipeline: parsing, IR generation, and
SASM output
    - Exploring advanced features like expression optimization and
static analysis
!!! quote
    > *"ORIN aims to make high-level programming compatible with low-
level control."*
[![](https://img.shields.io/badge/Language-C-blue)]
(https://en.wikipedia.org/wiki/C_(programming_language)) [![]
(https://img.shields.io/badge/Project-ORIN-orange)]() [![]
(https://img.shields.io/badge/Target-SASM-lightgrey)]()
!!! quote ""
```

!!! info inline end " Contact & Community"

```
!!! warning ""
!!! danger ""
```

```
[Soham-Metha/virex](https://github.com/Soham-Metha/virex)
    <br>[GitHub Issues](https://github.com/Soham-Metha/virex/issues)
    <br>[GitHub Discussions](https://github.com/Soham-
Metha/virex/discussions)
    <br>[CONTRIBUTING.md](../CONTRIBUTING.md)
    <br>[roadmap](roadmap.md)
```

Use the links above to explore the repository, report issues, join discussions, contribute, or follow the project's development roadmap.



Acknowledgments

We gratefully acknowledge the creators and communities that inspired and supported this project:

• Educational Inspiration:

Tsoding, Dr. Jonas Birch, Low Byte Productions, Cobb Coding for their deep dives into compilers, virtual machines, and systems programming.

Ecosystem & Tools:

The open-source communities around the JVM, and language tooling landscape, for providing extensible blueprints and motivation.

• Early Support:

Friends, testers, and curious peers who gave feedback during the early stages of development.

VIREX is open. Hackable. Minimal. Built for builders.