![Image](assets/credits.png)

Virtual Machine VIREX Assembly Language SASM Compiler ORIN Editor Support VS Code License GPL3

VIREX (VIRtual EXecuter) is a clean-room virtual machine built with clarity, extensibility, and education in mind. The project is maintained by two core developers who each own a unique layer of the system.

=== "Soham Metha"



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[![](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)]()

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

- 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.
- > *"VIREX is a hands-on way to explore systems programming, not just study it."*

=== "Omkar Jagtap"



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[![](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)]()

> **Role**: Compiler Engineer - ORIN

> **Modules Owned**: ORIN Compiler (WIP), Custom Hashtable
Implementation

- 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

> *"ORIN aims to make high-level programming compatible with low-level
control."*
```

Contact & Community

- GitHub: github.com/sohammetha/virex
- Interested in contributing? Check out CONTRIBUTING.md

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

References

- Tsoding
- Dr Birch
- Low Byte Productions
- Cobb Coding