



Annual Review for OpenQMC

5th Aug 2026



Brief Description:

OpenQMC is a high-quality Quasi-Monte Carlo (QMC) sampling library for feature film VFX production.

QMC is an integral part of rendering platforms and tools, reducing compute to make render times tractable.

TSC Chairperson:

Josh Bainbridge <josh.bainbridge@gmail.com>

TSC Members and Affiliations:

Josh Bainbridge (Framestore)

Lorna Dumba (Framestore)

Nathan Walster (Framestore)

Mark Hills (Cleanfeed)

Chris Kulla (Epic Games)

Contributed by:

Framestore

Github:

github.com/AcademySoftwareFoundation/openqmc

Website:

openqmc.org

Artwork:

artwork.aswf.io/projects/openqmc

Mailing list:

lists.aswf.io/g/openqmc-discussion

Slack channel:

academysoftwarefdn.slack.com/archives/C09BXDAMFTP

OpenSSF Best Practices Badge URL:

bestpractices.dev/en/projects/11292

(93% passing)

“**Framestore** are committed to continue contributing further improvements from production to this open initiative. We think the project’s mission to standardise such technology across our industry, together to collaborate and achieve ever greater tools for content creation, aligns with the goals of **ASWF**.

We also believe that adoption of **OpenQMC** as an **ASWF** sandbox project will help us achieve this by bringing adopters together in a single forum, and giving access and exposure to a larger community.”

Roadmap

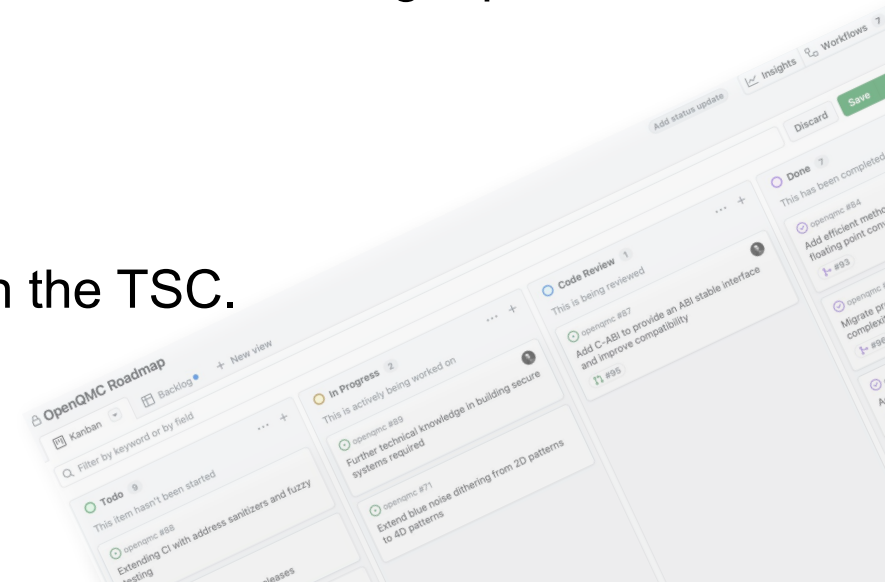
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Goals from last year:

- **Join ASWF and stand up governance.** Done. TSC formed, community channels running, regular meetings, OpenSSF badge in progress.
- **Lower the barrier to adoption.** Mostly done. Simplified build, website and logo shipped. New C-ABI and Python bindings are close but have not landed.
- **Improve CI and QMC methods.** Done. Less GHA churn, GPU tests running, updated to state-of-the-art techniques.

Planned next:

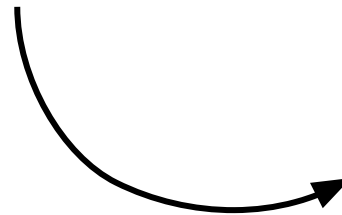
- Grow contributors, adopters and industry representation on the TSC.
- Provide broader access via C-ABI and Python bindings.
- Achieve the OpenSSF Passing badge.



Contributions

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- Small number of contributors, but very high quality contributions.
- Community implementing new research and providing techniques.
- We also receive a great deal of value in the form of consultation.
- **Still need to encourage more contributions from a broader group.**



Academy Software Foundation (ASWF) / openqmc Aug 4, 2025 → Aug 4, 2026

Contributor dependency

All activities



1 contributor
89% of all contributions

Other 8 contributors
11% of all contributions

Top contributors

Contributor	Total contributions
Josh Bainbridge Maintainer	277 - 89%
Euan Hughes	13 - 4%
mr-matthew-jones	7 - 2%
Chris Kulla	5 - 2%
toxie	3 - 1%

OLFX | Insights

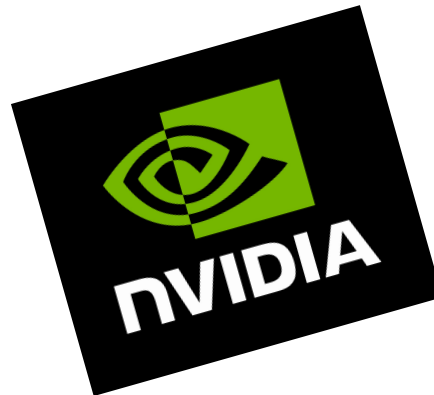
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Organisations Contributing / Adopting

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Typhoon



Adopted in 4 renderers
that we know of + more
in progress

Build and Project Engineering Matrices

Added to the build matrix:

- No dependencies beyond C++17, so compatible with CY2021 and newer.
- Recently migrated C++14 to C++17, moving the minimum platform up from CY2018.
- Supported on Linux, macOS and Windows, across x86-64, AArch64 and NVIDIA.
- Tested compiler list: Clang 6, Clang 21, GCC 7.5, MSVS 2022, NVCC 11
- Coming C-ABI binary will link only against libc.

Added to the project engineering contribution matrix:

- Framestore continues to be the primary contributor.
- 80% tactical and 80% strategic.

CI / Agentic Coding / Marketing Updates

Continuous integration:

- Using Nix for declarative environments to reduce GHA churn.
- We have now regained GPU testing with aswf-docker 🎉

Agentic coding:

- Used primarily for running benchmarks on POCs.
- Looking to add policy following OllO's example.

Marketing:

- Continuously deploying project website + API reference + test coverage report.
- We have a new logo and artwork (massive thanks to the LF art team!).

Other Key Achievements

- Move to C++17 simplified our build system (reducing adopter friction).
- Close to new C-ABI + broader support for more languages.
- Continued improvement to underlying techniques:
 - Implementation of new research and papers.
 - Exploration and discussion on novel techniques.
- Responded to feedback from developers:
 - Added workflow around Codespaces.
 - Continuously improving documentation.
- Managing issues:
 - Flagging good first issues.
 - Building our roadmap with GH Projects.

Incubation Requirements Report Card

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Technical Governance & Documentation

- [✓] README
- [✓] CODEOWNERS / COMMITTERS
- [✓] RELEASE
- [✓*] Mission & Scope
- [✓] Architecture & Features
- [✓] Roadmap
- [93%**] OpenSSF Badge (Passing)

Growth Assessment

- [✓] Contributor / committer / org counts
- [✓] Sustained commit flow
- [✓] Adopters identified
- [✓] Plan to expand committers
- [✓] Plan to reach Graduated Stage

* Mission and scope are defined in the README, but not under those headings.

** Remaining OpenSSF criteria cover fuzz testing with sanitizers and developer security knowledge, and we would welcome TAC guidance on both.

Areas the project could use help on

Please do get involved 

- TSC meetings are every 3rd Thursday at 4pm UTC:
zoom-lfx.platform.linuxfoundation.org/meetings/openqmc
- Join the Slack channel and mailing list:
academysoftwarefdn.slack.com/openqmc
lists.aswf.io/g/openqmc-discussion
- Share the project!
openqmc.org

TAC Open Discussion