

Resource Summary Report

Generated by SPARC SAWG on Jul 29, 2026

Microsoft SEAL

RRID:SCR_025184

Type: Tool

Proper Citation

Microsoft SEAL (RRID:SCR_025184)

Resource Information

URL: <https://github.com/microsoft/SEAL>

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Description: Software homomorphic encryption library. C++ FHE library implementing BFV and CKKS schemes. Allows computations to be performed directly on encrypted data. This enables software engineers to build end-to-end encrypted data storage and computation services where the customer never needs to share their key with the service.

Abbreviations: SEAL

Resource Type: software toolkit, software library, source code, software resource

Keywords: C++ FHE library, homomorphic encryption, encrypted data,

Availability: Free, Available for download, Freely available

Resource Name: Microsoft SEAL

Resource ID: SCR_025184

License: MIT license

Record Creation Time: 20240403T053245+0000

Record Last Update: 20260729T044617+0000

Ratings and Alerts

No rating or validation information has been found for Microsoft SEAL.

No alerts have been found for Microsoft SEAL.

Data and Source Information

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Wagner RS, et al. (2024) The recent disappearance of a persistent Planktothrix bloom: Characterization of a regime shift in the phytoplankton of Sandusky Bay (USA). Harmful algae, 136, 102656.

Pulido-Gaytan B, et al. (2024) Self-learning activation functions to increase accuracy of privacy-preserving Convolutional Neural Networks with homomorphic encryption. PloS one, 19(7), e0306420.

Ge AH, et al. (2024) Streptomyces-triggered coordination between rhizosphere microbiomes and plant transcriptome enables watermelon Fusarium wilt resistance. Microbial biotechnology, 17(3), e14435.

Charvet S, et al. (2024) Transcriptomics reveal a unique phago-mixotrophic response to low nutrient concentrations in the prasinophyte Pterosperma cristatum. ISME communications, 4(1), ycae083.

Kokkinakis S, et al. (2024) Development and internal validation of a clinical prediction model for serious complications after emergency laparotomy. European journal of trauma and emergency surgery : official publication of the European Trauma Society, 50(1), 283.

Hong S, et al. (2024) Privacy-preserving model evaluation for logistic and linear regression using homomorphically encrypted genotype data. Journal of biomedical informatics, 156, 104678.

Vasighizaker A, et al. (2024) SEGCECO: Subgraph Embedding of Gene expression matrix for prediction of CELL-cell COMMunication. Briefings in bioinformatics, 25(3).

Williams RT, et al. (2024) Possible Missing Sources of Atmospheric Glyoxal Part II: Oxidation of Toluene Derived from the Primary Production of Marine Microorganisms. Metabolites, 14(11).