Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 17, 2025

Microsoft SEAL

RRID:SCR_025184
Type: Tool

Proper Citation

Microsoft SEAL (RRID:SCR_025184)

Resource Information

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

Proper Citation: Microsoft SEAL (RRID:SCR_025184)

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 resource, source code, software toolkit, software library

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

Funding:

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: 20250517T060613+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

Source: SciCrunch Registry

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

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.

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.

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

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).

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.