XSEDE - Extreme Science and Engineering Discovery Environment

RRID:SCR_006091
Type: Tool

Proper Citation

XSEDE - Extreme Science and Engineering Discovery Environment (RRID:SCR_006091)

Resource Information

URL: https://www.xsede.org/

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Description: XSEDE is a single virtual system that scientists can use to interactively share computing resources, data and expertise. People around the world use these resources and services things like supercomputers, collections of data and new tools to improve our planet. XSEDE resources may be broadly categorized as follows: High Performance Computing, High Throughput Computing, Visualization, Storage, and Data Services. Many resources provide overlapping functionality across categories. Scientists, engineers, social scientists, and humanists around the world - many of them at colleges and universities - use advanced digital resources and services every day. Things like supercomputers, collections of data, and new tools are critical to the success of those researchers, who use them to make our lives healthier, safer, and better. XSEDE integrates these resources and services, makes them easier to use, and helps more people use them. XSEDE supports 16 supercomputers and high-end visualization and data analysis resources across the country. Digital services, meanwhile, provide users with seamless integration to NSF''s high-performance computing and data resources. XSEDE''s integrated, comprehensive suite of advanced digital services will federate with other high-end facilities and with campus-based resources, serving as the foundation for a national cyberinfrastructure ecosystem. Common authentication and trust mechanisms, global namespace and filesystems, remote job submission and monitoring, and file transfer services are examples of XSEDE''s advanced digital services. XSEDE''s standards-based architecture allows open development for future digital services and enhancements. XSEDE also provides the expertise to ensure that researchers can make the most of the supercomputers and tools.

Abbreviations: XSEDE

Synonyms: XSEDE - Extreme Science Engineering Discovery Environment, Extreme Science and Engineering Discovery Environment

Resource Type: portal, data or information resource

Keywords: data sharing, computing, supercomputer, data, tool, visualization, data analysis, cyberinfrastructure, digital service, high performance computing, high throughput computing, visualization, storage, data service

Funding: NSF OCI-1053575

Resource Name: XSEDE - Extreme Science and Engineering Discovery Environment

Resource ID: SCR_006091

Alternate IDs: nlx_151554, grid.501421.3

Alternate URLs: https://ror.org/05524hb64

Record Creation Time: 20220129T080234+0000

Record Last Update: 20250513T060755+0000

Ratings and Alerts

No rating or validation information has been found for XSEDE - Extreme Science and Engineering Discovery Environment.

No alerts have been found for XSEDE - Extreme Science and Engineering Discovery Environment.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Cueva Del Castillo R, et al. (2024) Annual temperature, body size, and sexual size dimorphism in the evolution of Pyrgomorphidae. Ecology and evolution, 14(8), e70188.

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Zhao Z, et al. (2021) Learning, visualizing and exploring 16S rRNA structure using an attention-based deep neural network. PLoS computational biology, 17(9), e1009345.

Tekle YI, et al. (2021) Comprehensive comparative genomics reveals over 50 phyla of free-living and pathogenic bacteria are associated with diverse members of the amoebozoa. Scientific reports, 11(1), 8043.

Mabry PL, et al. (2020) CADRE: A Collaborative, Cloud-Based Solution for Big Bibliographic Data Research in Academic Libraries. Frontiers in big data, 3, 556282.

Gerlach GJ, et al. (2020) A disordered encounter complex is central to the yeast Abp1p SH3 domain binding pathway. PLoS computational biology, 16(9), e1007815.

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Wang B, et al. (2016) Long-Range Signaling in MutS and MSH Homologs via Switching of Dynamic Communication Pathways. PLoS computational biology, 12(10), e1005159.

Perkins SJ, et al. (2016) Atomistic modelling of scattering data in the Collaborative Computational Project for Small Angle Scattering (CCP-SAS). Journal of applied crystallography, 49(Pt 6), 1861.

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Towers S, et al. (2015) Mass Media and the Contagion of Fear: The Case of Ebola in America. PloS one, 10(6), e0129179.

Westergard T, et al. (2015) Interactions of L-3,5,3'-Triiodothyronine [corrected], Allopregnanolone, and Ivermectin with the GABAA Receptor: Evidence for Overlapping Intersubunit Binding Modes. PloS one, 10(9), e0139072.

Goecks J, et al. (2015) Open pipelines for integrated tumor genome profiles reveal differences between pancreatic cancer tumors and cell lines. Cancer medicine, 4(3), 392.

Darris CE, et al. (2015) Molecular tools to support metabolic and immune function research in the Guinea Fowl (Numida meleagris). BMC genomics, 16(1), 358.