Resource Summary Report

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Statistics Online Computational Resource

RRID:SCR_003378
Type: Tool

Proper Citation

Statistics Online Computational Resource (RRID:SCR_003378)

Resource Information

URL: http://www.socr.ucla.edu/

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Description: A hierarchy of portable online interactive aids for motivating, modernizing probability and statistics applications. The tools and resources include a repository of interactive applets, computational and graphing tools, instructional and course materials. The core SOCR educational and computational components include the following suite of web-based Java applets: * Distributions (interactive graphs and calculators) * Experiments (virtual computer-generated games and processes) * Analyses (collection of common web-accessible tools for statistical data analysis) * Games (interfaces and simulations to real-life processes) * Modeler (tools for distribution, polynomial and spectral model-fitting and simulation) * Graphs, Plots and Charts (comprehensive web-based tools for exploratory data analysis), * Additional Tools (other statistical tools and resources) * SOCR Java-based Statistical Computing Libraries * SOCR Wiki (collaborative Wiki resource) * Educational Materials and Hands-on Activities (varieties of SOCR educational materials), * SOCR Statistical Consulting In addition, SOCR provides a suite of tools for volume-based statistical mapping (http://wiki.stat.ucla.edu/socr/index.php/SOCR_EduMaterials_AnalysesCommandLine) via command-line execution and via the LONI Pipeline workflows (http://www.nitrc.org/projects/pipeline). Course instructors and teachers will find the SOCR class notes and interactive tools useful for student motivation, concept demonstrations and for enhancing their technology based pedagogical approaches to any study of variation and uncertainty. Students and trainees may find the SOCR class notes, analyses, computational and graphing tools extremely useful in their learning/practicing pursuits. Model developers, software programmers and other engineering, biomedical and applied researchers may find the light-weight plug-in oriented SOCR computational libraries and infrastructure useful in their algorithm designs and research efforts. The three types of SOCR resources are: * Interactive Java applets: these include a number of different applets, simulations,

demonstrations, virtual experiments, tools for data visualization and analysis, etc. All applets require a Java-enabled browser (if you see a blank screen, see the SOCR Feedback to find out how to configure your browser). * Instructional Resources: these include data, electronic textbooks, tutorials, etc. * Learning Activities: these include various interactive hands-on activities. * SOCR Video Tutorials (including general and tool-specific screencasts).

Abbreviations: SOCR

Resource Type: software application, software toolkit, data or information resource, narrative resource, training material, software resource

Defining Citation: PMID:21451741, PMID:21297884

Keywords: probability, statistics, instruction, statistical computing, applet, computational tool, graphing tool, course material, computation, java, statistical mapping, graphing, computational neuroscience, java, loni pipeline, educator, student, tool developer

Funding: NIH Roadmap for Medical Research ;
NSF 0442992;
NSF DUE 0716055;
NSF 1023115;
NCRR U54 RR021813

Availability: GNU Lesser General Public License

Resource Name: Statistics Online Computational Resource

Resource ID: SCR_003378

Alternate IDs: nif-0000-32655

Alternate URLs: http://www.nitrc.org/projects/socr

Record Creation Time: 20220129T080218+0000

Record Last Update: 20250402T060251+0000

Ratings and Alerts

No rating or validation information has been found for Statistics Online Computational Resource.

No alerts have been found for Statistics Online Computational Resource.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Backer R, et al. (2015) Phylogenetic and expression analysis of the NPR1-like gene family from Persea americana (Mill.). Frontiers in plant science, 6, 300.

Adkisson CD, et al. (2014) Surgeon volume and adequacy of thyroidectomy for differentiated thyroid cancer. Surgery, 156(6), 1453.

Adkisson CD, et al. (2014) Fibromyalgia symptoms and medication requirements respond to parathyroidectomy. Surgery, 156(6), 1614.

Tandon N, et al. (2014) Galvanic microparticles increase migration of human dermal fibroblasts in a wound-healing model via reactive oxygen species pathway. Experimental cell research, 320(1), 79.

Peysselon F, et al. (2014) Heparin-protein interactions: from affinity and kinetics to biological roles. Application to an interaction network regulating angiogenesis. Matrix biology : journal of the International Society for Matrix Biology, 35, 73.

Meintjes EM, et al. (2014) A tensor-based morphometry analysis of regional differences in brain volume in relation to prenatal alcohol exposure. NeuroImage. Clinical, 5, 152.

Hodges TK, et al. (2013) Large fluctuations in the effective population size of the malaria mosquito Anopheles gambiae s.s. during vector control cycle. Evolutionary applications, 6(8), 1171.

Campbell NA, et al. (2013) Early experience photoselective vaporisation of the prostate using the 180W lithium triborate and comparison with the 120W lithium triborate laser. Prostate international, 1(1), 42.

Yang Y, et al. (2012) Disease and genetic contributions toward local tissue volume disturbances in schizophrenia: a tensor-based morphometry study. Human brain mapping, 33(9), 2081.

Leong NL, et al. (2012) Age-related adaptation of bone-PDL-tooth complex: Rattus-Norvegicus as a model system. PloS one, 7(4), e35980.

Mayshar Y, et al. (2011) Teratogen screening using transcriptome profiling of differentiating human embryonic stem cells. Journal of cellular and molecular medicine, 15(6), 1393.

Christou N, et al. (2011) Confidence interval based parameter estimation--a new SOCR applet and activity. PloS one, 6(5), e19178.

Stimpson KM, et al. (2010) Telomere disruption results in non-random formation of de novo dicentric chromosomes involving acrocentric human chromosomes. PLoS genetics, 6(8).