BioVis Explorer (http://biovis.lnu.se) — survey summary (as of June 1, 2017)

Technique	☰	🕸	🌲	T	🕐	📊	⛶	☁	🖴	❓	✥	🔍	▽	📌	⇩	🏷	✎	🔖	👤
Visualizing large hierarchical clusters in hyperbolic space (2000)		X		X				X			X				X				
BioLayout - an automatic graph layout algorithm for similarity visualization (2001)		X						X			X								
Visualizing Biosequence data using Texture Mapping (2002)				X				X			X								
Patika: an integrated visual environment for collaborative construction and analysis of cellular pathways (2002)		X					X	X			X								
Case Study: Visualizing Sets of Evolutionary Trees (2002)			X		X			X						X	X				
Global Visualization and Alignments of Whole Bacterial Genomes (2003)				X				X			X						X		
A fast layout algorithm for protein interaction networks (2003)		X						X			X								
Coordinated Graph and Scatter-Plot Views for the Visual Exploration of Microarray Time-Series Data (2003)	X				X			X			X								
GeneVis: Simulation and Visualization of Genetic Networks (2003)		X			X			X			X								
An Interactive Visualisation for Investigating DNA Sequence Information (2004)				X				X			X								X
Visualizations for taxonomic and phylogenetic trees (2004)			X					X			X								
Integration of metabolic networks and gene expression in virtual reality (2005)	X	X						X			X								
A system for visualizing and analyzing near-optimal protein sequence alignments (2005)				X				X			X								
Exploratory visualization of array-based comparative genomic hybridization (2005)	X							X			X								
ProViz: protein interaction visualization and exploration (2005)		X												X					
VitaPad: visualization tools for the analysis of pathway data (2005)		X						X			X								
Extending taxonomic visualisation to incorporate synonymy and structural markers (2005)			X					X											
A Framework for Visualization of Microarray Data and Integrated Meta Information (2005)	X				X			X			X								X
Animated interval scatter-plot views for the exploratory analysis of large-scale microarray time-course data (2005)		X			X									X					
Paloverde: an OpenGL 3D phylogeny browser (2006)			X															X	
springScape: visualisation of microarray and contextual bioinformatic data using spring embedding and an 'information landscape' (2006)	X		X					X			X								
TreeQ-VISTA: an interactive tree visualization tool with functional annotation query capabilities (2007)			X					X			X								
Exploring Multiple Trees through DAG Representations (2007)			X					X											
GOlorize: a Cytoscape plug-in for network visualization with Gene Ontology-based layout and coloring (2007)		X						X			X								
Cerebral: a Cytoscape plugin for layout of and interaction with biological networks using subcellular localization annotation (2007)		X						X			X								
QTLNetwork: mapping and visualizing genetic architecture of complex traits in experimental populations (2008)	X			X				X			X								
Presenting and exploring biological pathways with PathVisio (2008)		X						X			X								
Dynamic Visualization of Coexpression in Systems Genetics Data (2008)		X									X			X					
TreeMos: a high-throughput phylogenomic approach to find and visualize phylogenetic mosaicism (2008)			X					X			X								
VistaClara: an expression browser plug-in for Cytoscape (2008)	X	X						X			X								
NetworkBLAST: comparative analysis of protein networks (2008)		X						X											
PhyloWidget: web-based visualizations for the tree of life (2008)			X					X			X								
Interactive visualization software for exploring phylogenetic trees and clades (2008)			X					X			X								X
Cerebral: Visualizing Multiple Experimental Conditions on a Graph with Biological Context (2008)	X	X						X			X								
Caleydo: Connecting Pathways and Gene Expression (2009)	X	X						X			X								
Treevolution: visual analysis of phylogenetic trees (2009)			X					X			X								
Using Projection and 2D Plots to Visually Reveal Genetic Mechanisms of Complex Human Disorders (2009)	X							X			X								
ABySS-Explorer: Visualizing Genome Sequence Assemblies (2009)				X				X			X								
MizBee: A Multiscale Synteny Browser (2009)				X				X			X			X					
AssociationViewer: a scalable and integrated software tool for visualization of large-scale variation data in genomic context (2009)				X				X			X								
PhyloDet: a scalable visualization tool for mapping multiple traits to large evolutionary trees (2009)			X		X			X											
Circos: An information aesthetic for comparative genomics (2009)	X			X				X			X								
MassVis: Visual Analysis of Protein Complexes Using Mass Spectrometry (2009)	X	X						X			X								
GeneShelf: A Web-based Visual Interface for Large Gene Expression Time-Series Data Repositories (2009)	X			X				X			X								
BioCichlid: central dogma-based 3D visualization system of time-course microarray data on a hierarchical biological network (2009)		X			X			X			X								
A novel method for large tree visualization (2009)			X					X			X							X	
SpRay: A Visual Analytics Approach for Gene Expression Data (2009)	X			X				X			X								
GeneTerrain: Visual exploration of differential gene expression profiles organized in native biomolecular interaction networks (2010)		X						X			X			X					

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Interactive microbial genome visualization with GView (2010)				█		█								█					
Gremlin: An Interactive Visualization Model for Analyzing Genomic Rearrangements (2010)				█		█			█					█					
MulteeSum: A Tool for Comparative Spatial and Temporal Gene Expression Data (2010)	█			█	█				█					█					
Visual Integration of Quantitative Proteomic Data, Pathways, and Protein Interactions (2010)	█			█		█			█										
iHAT: interactive Hierarchical Aggregation Table (2011)			█	█		█					█			█					
Visualization of Anisotropic Contact Potentials within Protein Structures (2011)				█							█								
MGV: a generic graph viewer for comparative omics data (2011)	█			█		█					█			█					
Automatic generation of protein structure cartoons with Pro-origami (2011)				█							█								
Cytoscape 2.8: new features for data integration and network visualization (2011)		█							█		█			█					█
RuleBender: Integrated Visualization for Biochemical Rule-Based Modeling (2011)		█									█			█					
Visual Analysis of Next-Generation Sequencing Data to Detect Overlapping Genes in Bacterial Genomes (2011)				█		█					█	█		█					
Creating views on integrated multidomain data (2011)	█			█		█					█			█					
Interactive, multiscale navigation of large and complicated biological networks (2011)		█									█	█		█					
MDMap: A System for Data-Driven Layout and Exploration of Molecular Dynamics Simulations (2011)		█			█						█			█					
Evaluating the VIPER Pedigree Visualisation: Detecting Inheritance Inconsistencies in Genotyped Pedigrees (2011)	█	█		█							█								
EVEVis: A Multi-Scale Visualization System for Dense Evolutionary Data (2011)	█	█		█							█			█					
Metrics for Comparing Explicit Representations of Interconnected Biological Networks (2011)		█																	
A Visual Analysis System for Metabolomics Data (2011)				█		█					█			█					
GenPlay, a multipurpose genome analyzer and browser (2011)				█		█		█			█			█					
Parallel Contour-Buildup Algorithm for the Molecular Surface (2011)				█							█								
TIALA – Time Series Alignment Analysis (2011)				█	█						█			█					
The Galaxy Track Browser: Transforming the Genome Browser from Visualization Tool to Analysis Tool (2011)				█		█					█	█			█				
Modeling and Visualization of Receptor Clustering on the Cellular Membrane (2011)			█						█		█								
TVNViewer: An interactive visualization tool for exploring networks that change over time or space (2011)		█			█						█								
GenAMap: Visualization Strategies for Structured Association Mapping (2011)	█								█		█								█
Visualizing Virus Population Variability From Next Generation Sequencing Data (2011)				█					█		█			█					
HiTSEE: A Visualization Tool for Hit Selection and Analysis in High-Throughput Screening Experiments (2011)	█						█		█		█		█						
Sequence Surveyor: Leveraging Overview for Scalable Genomic Alignment Visualization (2011)				█				█			█			█					
Uncertainty-Aware Visual Analysis of Biochemical Reaction Networks (2012)		█							█		█		█						
ADVISe: Visualizing the dynamics of enzyme annotations in UniProt/Swiss-Prot (2012)	█			█		█					█			█		█			
Gene-RiViT: A visualization tool for comparative analysis of gene neighborhoods in prokaryotes (2012)				█							█								
Implicit Surfaces for Interactive Graph Based Cavity Analysis of Molecular Simulations (2012)		█									█								
enRoute: Dynamic Path Extraction from Biological Pathway Maps for In-Depth Experimental Data Analysis (2012)	█	█				█					█		█						
Heterogeneity-based Guidance for Exploring Multiscale Data in Systems Biology (2012)		█									█								█
Dynamic Channels in Biomolecular Systems: Path Analysis and Visualization (2012)		█									█			█					
Hive plots — rational approach to visualizing networks (2012)		█				█		█			█			█					
Guiding the interactive exploration of metabolic pathway interconnections (2012)		█				█					█			█					█
Towards Real-Time Visualization of Detailed Neural Tissue Models: View Frustum Culling for Parallel Rendering (2012)				█							█								
Compressed Adjacency Matrices: Untangling Gene Regulatory Networks (2012)		█									█			█	█				
MaTSE: The Microarray Time-Series Explorer (2012)				█	█						█	█		█					
HumMod Browser: An Exploratory Visualization Tool for the Analysis of Whole-Body Physiology Simulation Data (2013)	█			█	█						█								█
STAR: an integrated solution to management and visualization of sequencing data (2013)	█			█		█					█			█					
COMBat: Visualizing co-occurrence of annotation terms (2013)	█		█			█					█			█	█				
neuroMap – Interactive Graph-Visualization of the Fruit Fly's Neural Circuit (2013)		█							█		█								
MoClo Planner: Interactive Visualization for Modular Cloning Bio-Design (2013)		█		█					█		█								
The Molecular Control Toolkit: Controlling 3D Molecular Graphics via Gesture and Voice (2013)				█							█								
Leveraging Wall-sized High-Resolution Displays for Comparative Genomics Analyses of Copy Number Variation (2013)				█		█	█				█			█					
VisNEST – Interactive Analysis of Neural Activity Data (2013)	█					█					█			█					
PresentaBALL – a Powerful Package for Presentations and Lessons in Structural Biology (2013)		█									█		█						

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Large-scale multiple sequence alignment visualization through gradient vector flow analysis (2013)				✓											✓				
Entourage: Visualizing Relationships between Biological Pathways using Contextual Subsets (2013)	✓	✓		✓		✓		✓	✓		✓			✓					
Visual Cleaning of Genotype Data (2013)		✓			✓			✓			✓								✓
Exploring biological data: Mappings between ontology- and cluster-based representations (2013)		✓	✓			✓					✓								
LineUp: Visual Analysis of Multi-Attribute Rankings (2013)	✓					✓					✓				✓				
Variant View: Visualizing Sequence Variants in their Gene Context (2013)				✓							✓								
Genome-Wide Detection of sRNA Targets with rNAV (2013)		✓									✓	✓							
From Biochemical Reaction Networks to 3D Dynamics in the Cell: the ZigCell3D Modeling, Simulation and Visualisation Framework (2013)		✓			✓		✓				✓								
Analyzing Chromatin Using Tiled Binned Scatterplot Matrices (2014)	✓					✓					✓								
Genotet: An Interactive Web-based Visual Exploration Framework to Support Validation of Gene Regulatory Networks (2014)	✓	✓		✓		✓					✓	✓		✓					
Visualization of gene expression information within the context of the mouse anatomy (2014)	✓			✓		✓					✓								
Helium: Visualization of Large Scale Plant Pedigrees (2014)			✓								✓							✓	
Addressing the unmet need for visualizing conditional random fields in biological data (2014)						✓					✓								
ConTour: Data-Driven Exploration of Multi-Relational Datasets for Drug Discovery (2014)	✓			✓				✓			✓			✓					
UpSet: Visualization of Intersecting Sets (2014)	✓					✓					✓								
inPHAP: Interactive visualization of genotype and phased haplotype data (2014)				✓							✓					✓			✓
ReadXplorer – visualization and analysis of mapped sequences (2014)				✓							✓								
Domino: Extracting, Comparing, and Manipulating Subsets across Multiple Tabular Datasets (2014)	✓					✓					✓								
BiNA: a visual analytics tool for biological network data (2014)	✓	✓									✓					✓			
Rebuilding KEGG Maps: Algorithms and Benefits (2014)		✓							✓		✓								
MCA: Multiresolution Correlation Analysis, a graphical tool for subpopulation identification in single-cell gene expression data (2014)		✓				✓					✓								
MIMTool: A Tool for Drawing Molecular Interaction Maps (2014)		✓		✓				✓								✓			
eXamine: Exploring annotated modules in networks (2014)		✓									✓			✓		✓			
iGPSe: A visual analytic system for integrative genomic based cancer patient stratification (2014)	✓	✓				✓					✓								✓
VisRseq: R-based visual framework for analysis of sequencing data (2015)				✓		✓					✓								
GOplot: an R package for visually combining expression data with functional analysis (2015)	✓					✓													
Visual analysis of biological data-knowledge networks (2015)		✓									✓					✓			
Integrated visual analysis of protein structures, sequences, and feature data (2015)		✓		✓							✓					✓			
VisExpress: Visual exploration of differential gene expression data (2015)	✓			✓		✓					✓					✓			
Visual parameter optimisation for biomedical image processing (2015)	✓										✓					✓			
Extended LineSets: A visualization technique for the interactive inspection of biological pathways (2015)								✓			✓					✓			
VISIONET: intuitive visualisation of overlapping transcription factor networks, with applications in cardiogenic gene discovery (2015)		✓									✓								
coMET: visualisation of regional epigenome-wide association scan results and DNA co-methylation patterns (2015)	✓					✓					✓								
cnvCurator: an interactive visualization and editing tool for somatic copy number variations (2015)				✓		✓					✓						✓		
XCluSim: A visual analytics tool for interactively comparing multiple clustering results of bioinformatics data (2015)	✓					✓					✓				✓				
miRTarVis: An interactive visual analysis tool for microRNA-mRNA expression profile data (2015)	✓	✓									✓					✓			
Pan-Tetris: an interactive visualisation for Pan-genomes (2015)				✓							✓								
GRAPHIE: graph based histology image explorer (2015)		✓									✓	✓							
ReactionFlow: Visualizing Relationships between Proteins and Complexes in Biological Pathways (2015)	✓	✓									✓								
PathwayMatrix: Visualizing binary relationships between proteins in biological pathways (2015)	✓										✓				✓				
LayerCake: a tool for the visual comparison of viral deep sequencing data (2015)				✓		✓					✓					✓			
Epiviz: a view inside the design of an integrated visual analysis software for genomics (2015)				✓		✓					✓							✓	
BactoGeNIE: a large-scale comparative genome visualization for big displays (2015)				✓			✓				✓								
J-Circos: an interactive Circos plotter (2015)						✓					✓								
Treelink: data integration, clustering and visualization of phylogenetic trees (2015)			✓					✓			✓				✓				
Vials: Visualizing Alternative Splicing of Genes (2016)		✓		✓							✓								
CompNet: a GUI based tool for comparison of multiple biological interaction networks (2016)		✓									✓								
HilbertCurve: an R/Bioconductor package for high-resolution visualization of genomic data (2016)				✓		✓		✓											
Integrated Genome Browser: visual analytics platform for genomics (2016)				✓		✓					✓			✓				✓	