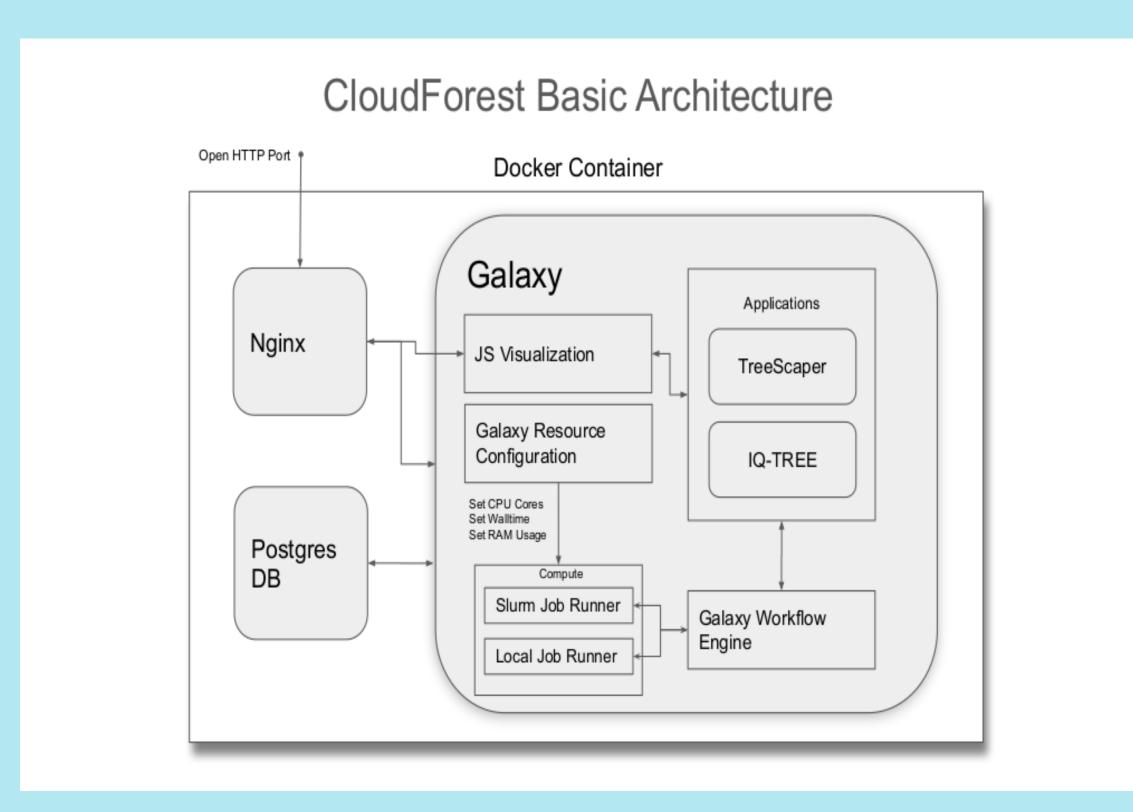
# CloudForest: An Integrated and Dynamic Phylogenomic Toolset for the Modern Age Contributors:

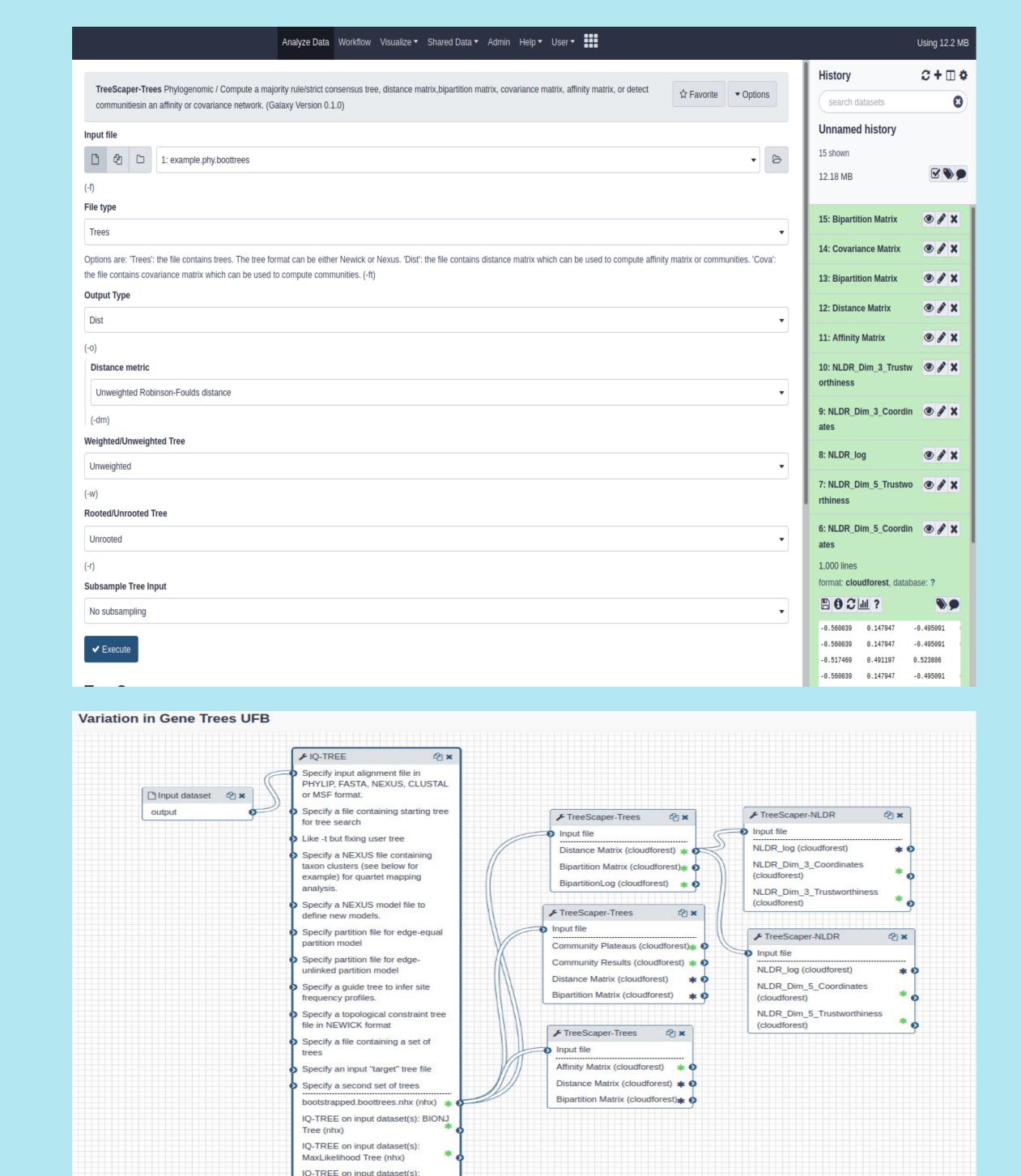
Benjamin S. Toups (Presenter)
Thomas McGowan
Jeremy M. Brown
Kyle A. Gallivan
James C. Wilgenbusch

## Architecture



CloudForest exists as a Dockerized version of the Galaxy Framework with access to local CPUs and RAM

## Interface

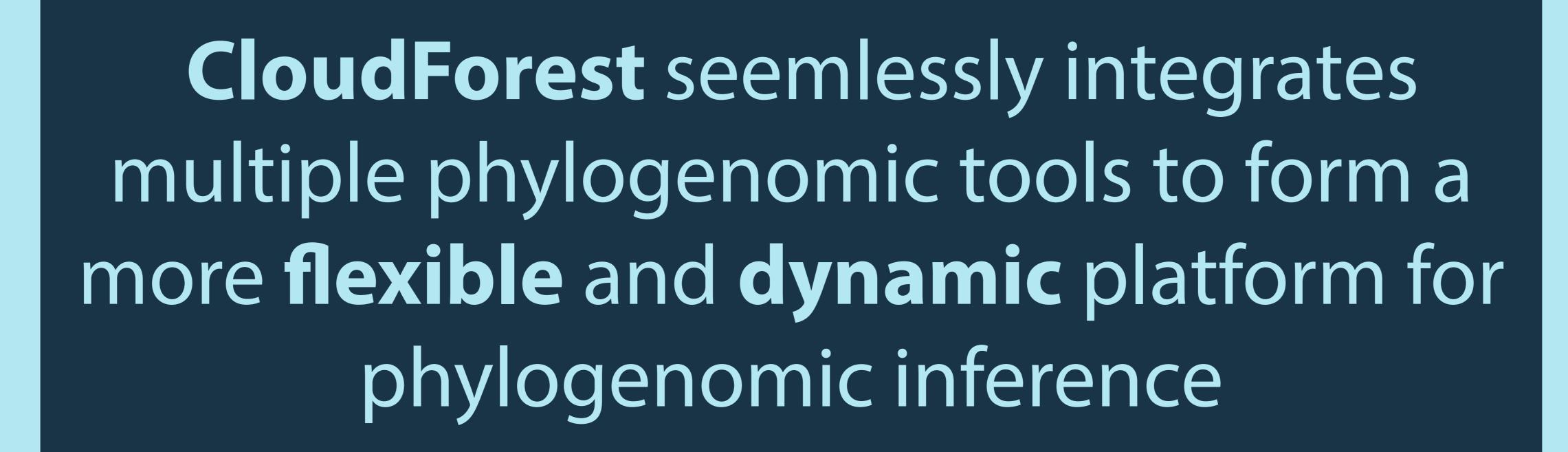


Built in workflow and data viewing features make using CloudForest a seemless and flexible experience.

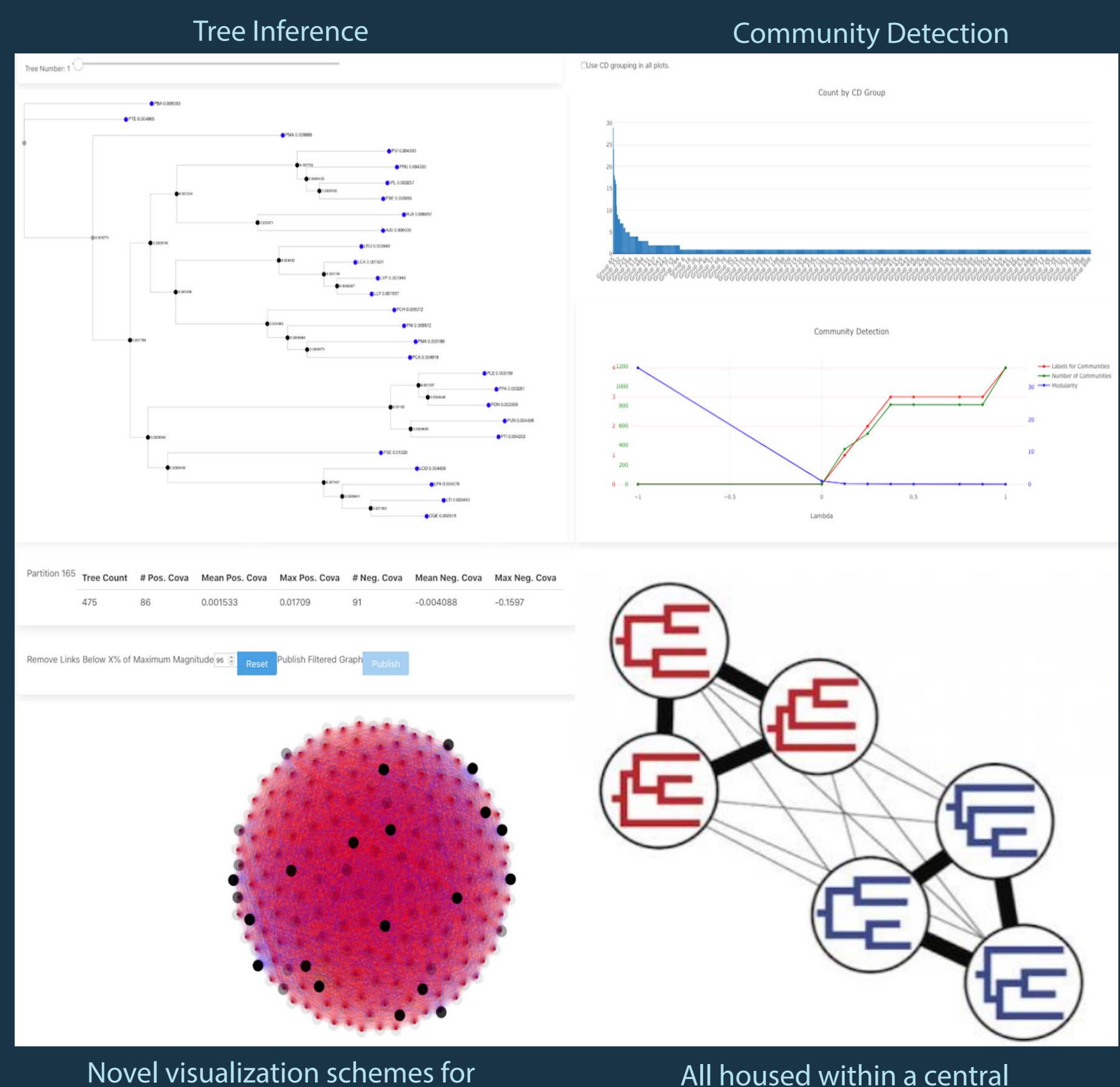
IQ-TREE on input dataset(s

and Final Tree (iqtree)

IQ-TREE on input dataset(s): Report



Large sets of phylogenetic trees often contain a vast amount of information about the dataset simply in the way that treespace itself is organized. However, the means with which to collect and analyze this information are currently disjointed and limited in their scope. CloudForest seeks to address this issue by integrating and streamlining the multiple programs required to perform such analyses in an intuitive way, and to add functionality to address gaps in the current software.



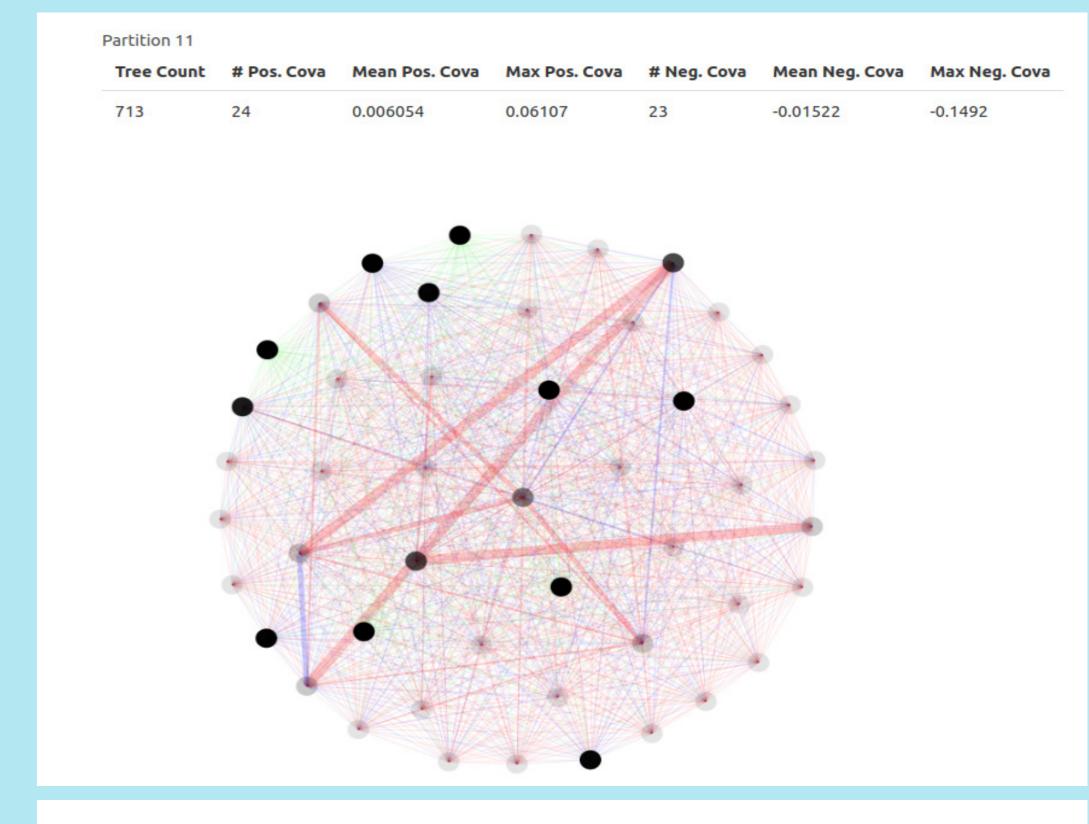
Novel visualization schemes for networks, NLDR, and more

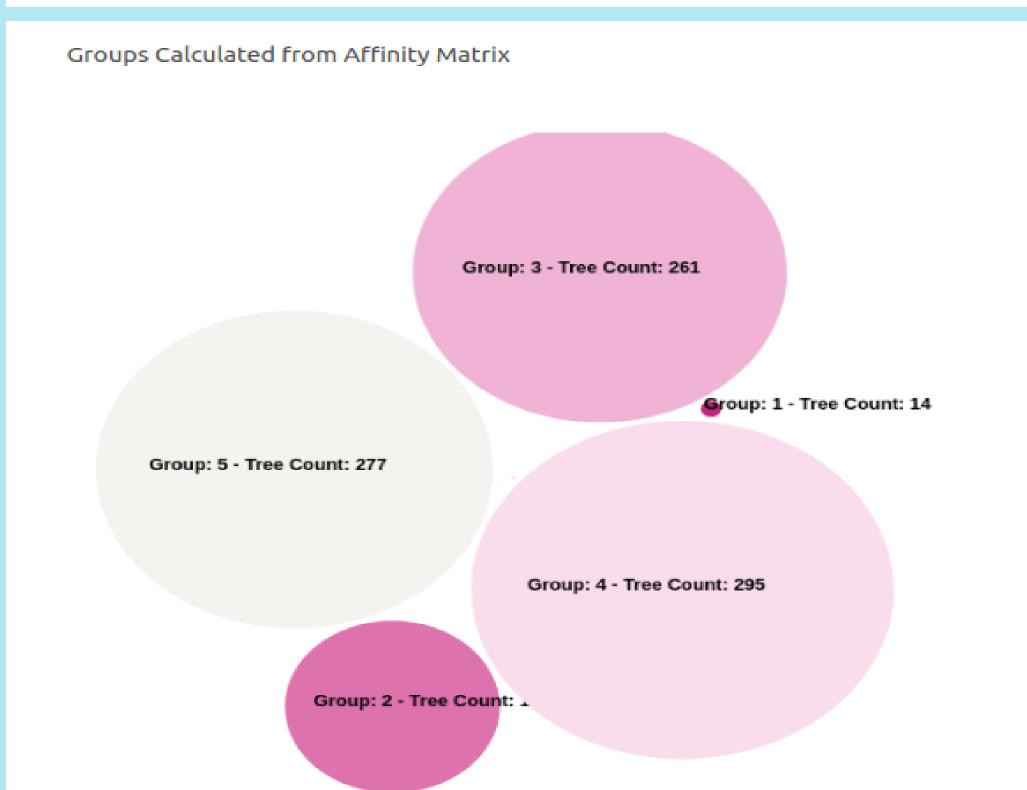
To follow development efforts and get updates on future releases, follow the CloudForest github page and look out for the forthcoming website!

framework

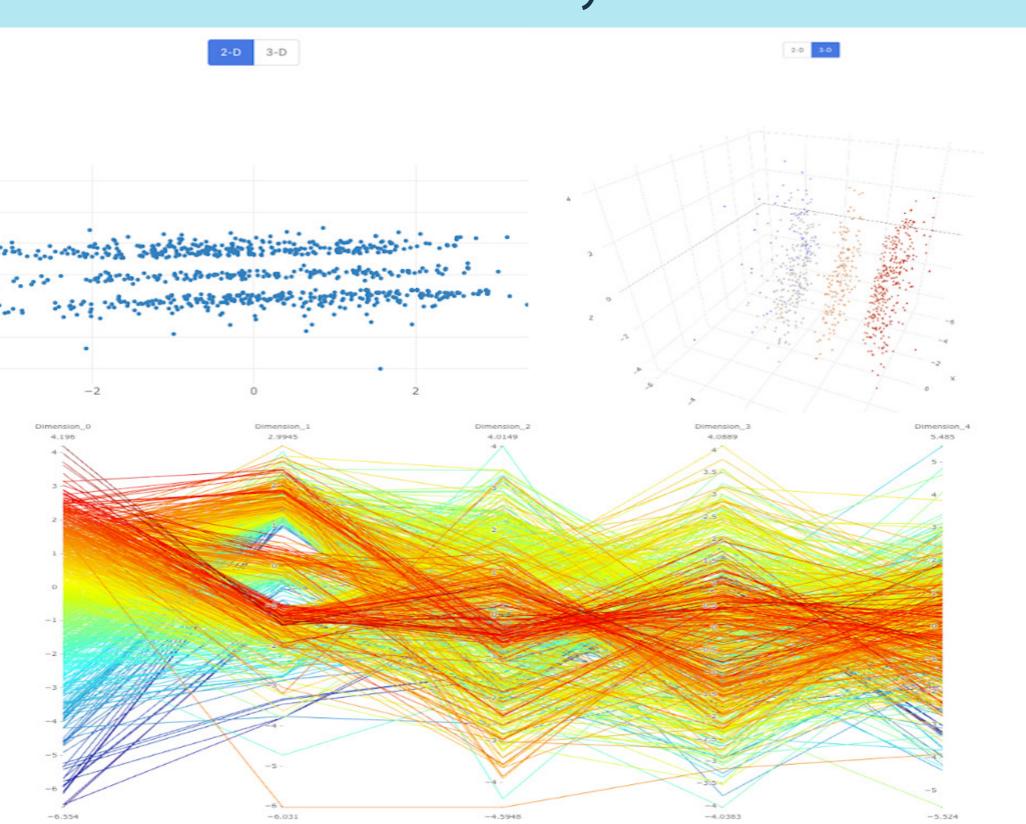
\*Zoom in for a more detailed view of the architecture, interfaces, and outputs!

# Sample Analyses and Output





New modular tools for visualizing network results allow for inference from treesets to inform downstream analyses.



Visualization tools allow for viewing and manipulating Non-Linear Dimensionality Reduction (NLDR) results within CloudForest.

### **Acknowledgements and Citations**

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