

## **Discrete topological methods for cybersecurity, network science, and machine learning**

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We touch on two discrete topological methods—path homology and magnitude homology—that are fairly new even by the standards of topological data analysis, and that are naturally suited to analyze data prevalent in cybersecurity applications, network science, and tasks in machine learning. Throughout, we mention new or plausible near-term applications.

Keywords: path homology, magnitude homology, digraphs