

# Demonstrations

## Bringing Real-World Data and Visualizations Into Data Structures Courses Using BRIDGES

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This demo introduces participants to the concepts and application of BRIDGES, a software infrastructure designed to facilitate hands-on experience for solving traditional problems in introductory computer science courses using data from real-world systems that are of interest to students, such as Facebook, Twitter, and Google Maps. BRIDGES provides access to real-world data sets for use in traditional data structures programming assignments, without requiring students to work with complex and varied APIs to acquire such data. BRIDGES also helps the students to explore and understand the use of data structures by providing each student with a visualization of operations performed on the student's own implementation of a data structure. BRIDGES visualizations can be easily shared (via a weblink) with peers, friends, and family. Demo attendees will see (and possibly engage in) hands-on experience with BRIDGES and will have the opportunity to discuss how BRIDGES can be used to support various introductory computer science courses. Additionally, the demo will complement our oral presentation of our work at SIGCSE, by providing hands-on demonstrations of BRIDGES.

**Keywords:** data structure; visualization; retention

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