DJing has been a passion of mine since college. Throughout the years, I have obsessed over finding songs that I can seamlessly mix together to create new ideas or interpretations. However, this can be an extremely tedious process, as my collection of as little ~150 songs has over ten thousand possible pair combinations to test! Thus, I was inspired develop a more systemic, data-driven approach to uncover harmonic connections in my music library.

In addition to data science, Brian also has a passion for DJing. Learn more about how he used the LibROSA Python package to extract harmonic characteristics from his music collection to find songs that are compatible for mashups.

A picture containing monitor, screen, television, computer

Description automatically generated

While modern DJ software provide an array of functionalities around how DJs can perform their music, little advancements have been made on providing DJs with insights on what music to play. Learn more about how Brian developed functionalities inspired by network theory to help DJs with song selection and tracklist planning.

A picture containing text, map

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Brian believes that data-driven solutions are the next frontier for DJ software innovations. Learn more about his approach to building DJ mixes by using Dijkstra's Shortest Path algorithm to construct tracklists in which all adjacent songs in the tracklist are harmonically compatible.

A picture containing outdoor, red, light, air

Description automatically generated