Einleitungsstuff:

Metablic Pathways are groups of enzyme katalytical metabolism, which im Verbund have biological functions. These Pathways may be connected with each other. Comparing several more or less related bacterial species one may ask which of these pathways are more common and therefore possibly essential. At the same time, one may wants to know if there are unique pathways even when the species are closely related. Hier was von wegen, wenn was einzigartig ist könnten weitere biologische Annahmen getoffen werden, warum genau dieser Pathway unique ist z.B. Pathogenität.

This workflow/pipeline uses MinPath (Minimal set of Pathways | link zum Paper einfügen) to find the minimum number of pathways in a given set of reference pathways of a pool of selected organisms. Those potential pathways are then characterised as accessory or core pathways and further information are gathered and stored in a json file (or alternatively in a js file). In the end, the results are visualized in a webpage using primarily NVD3.js (link zu nvd3) for the charts.