

COMP 767 - Assignment 1

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1 Vintage Luxury Trends

One dataset that can be interesting and challenging to look at comes from the company that I worked with in the past year.

2 Phylogenetic Tree

Motivated by my interest in evolution theory, I choose the phylogenetic tree for my second network. Defining species as vertices and evolutionary relationships as edges, we can obtain a directed graph. We can call a species u a parent of species v if species v is evolved from species u and no other species is in the evolution path between u and v . This relationship can be marked by a directed edge from child to parent. Some potentially interesting exercises that can be done with this network are visualization and clustering (e.g.: classifying species into families).

2.1 Data Source and Gathering Method

The data I gathered is from the Ensembl Rest API (<https://rest.ensembl.org>). Their taxonomic classification endpoint returns a list of parents and each of their children for a queried species.

The method that I used is a script that queries for