Graph algorithms

David Svaty

Faculty of Information Technology, BUT

May 1, 2023

What is a graph

- Non-linear data structure
- Consists of vertices and edges
- Vertices are nodes and edges connect them
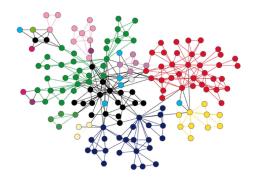- Denoted by $G(E, V)$

Graph example

Figure: Example of a graph. Graph consists of nodes connected by lines.

Examples of graph algorithms

- Breadth-first search
- Depth-first search
- Shortest path
- Minimum spanning tree