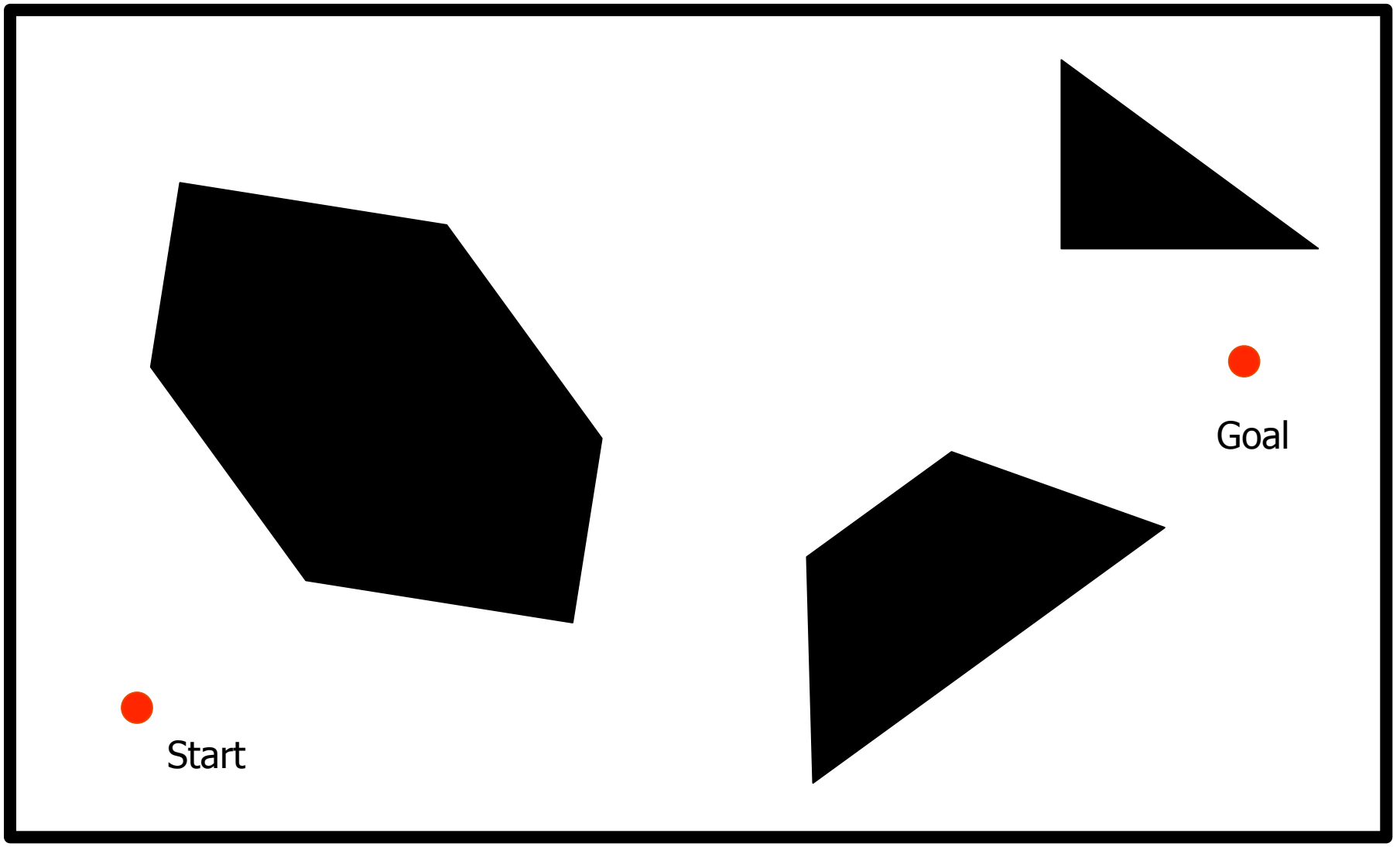
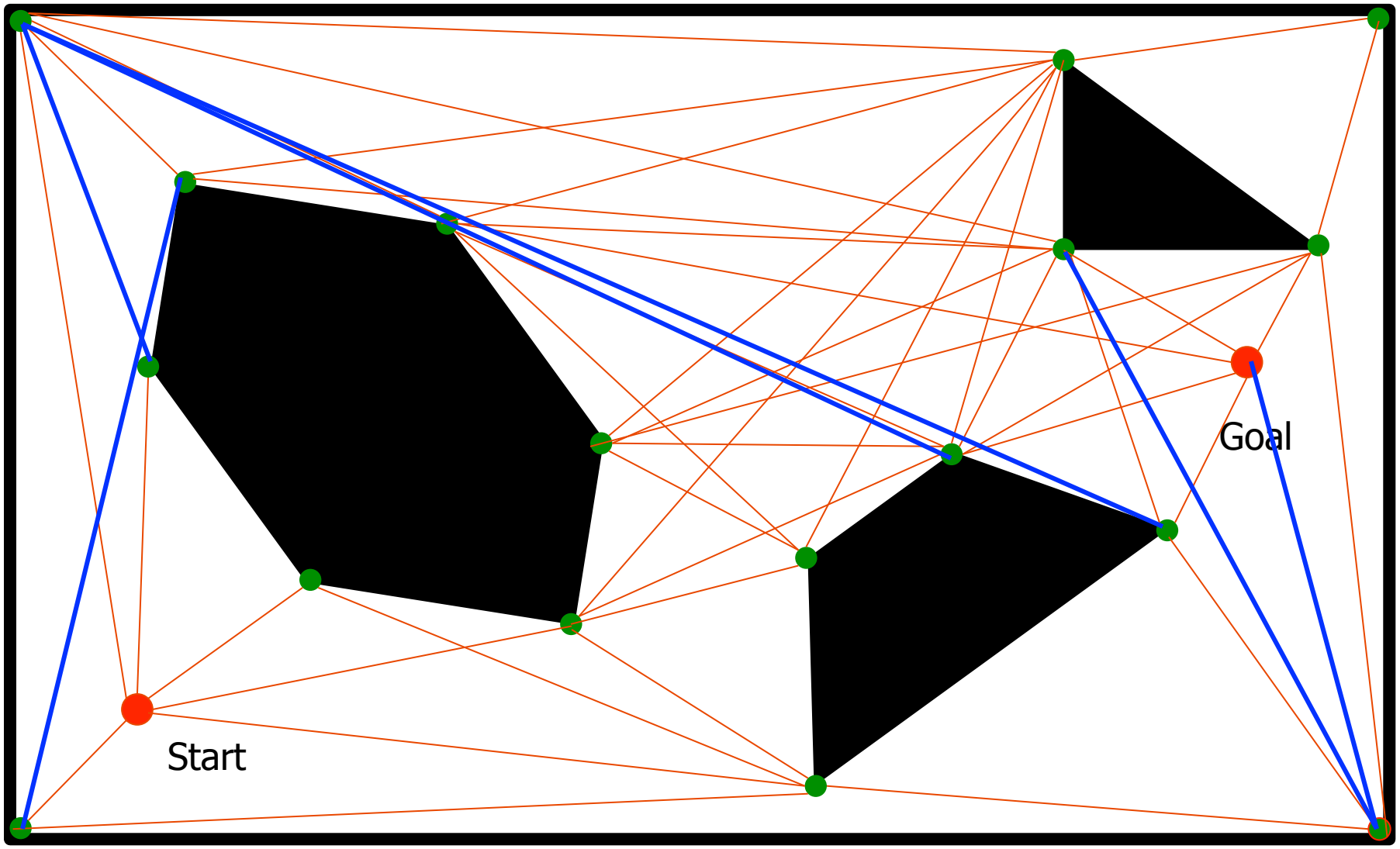
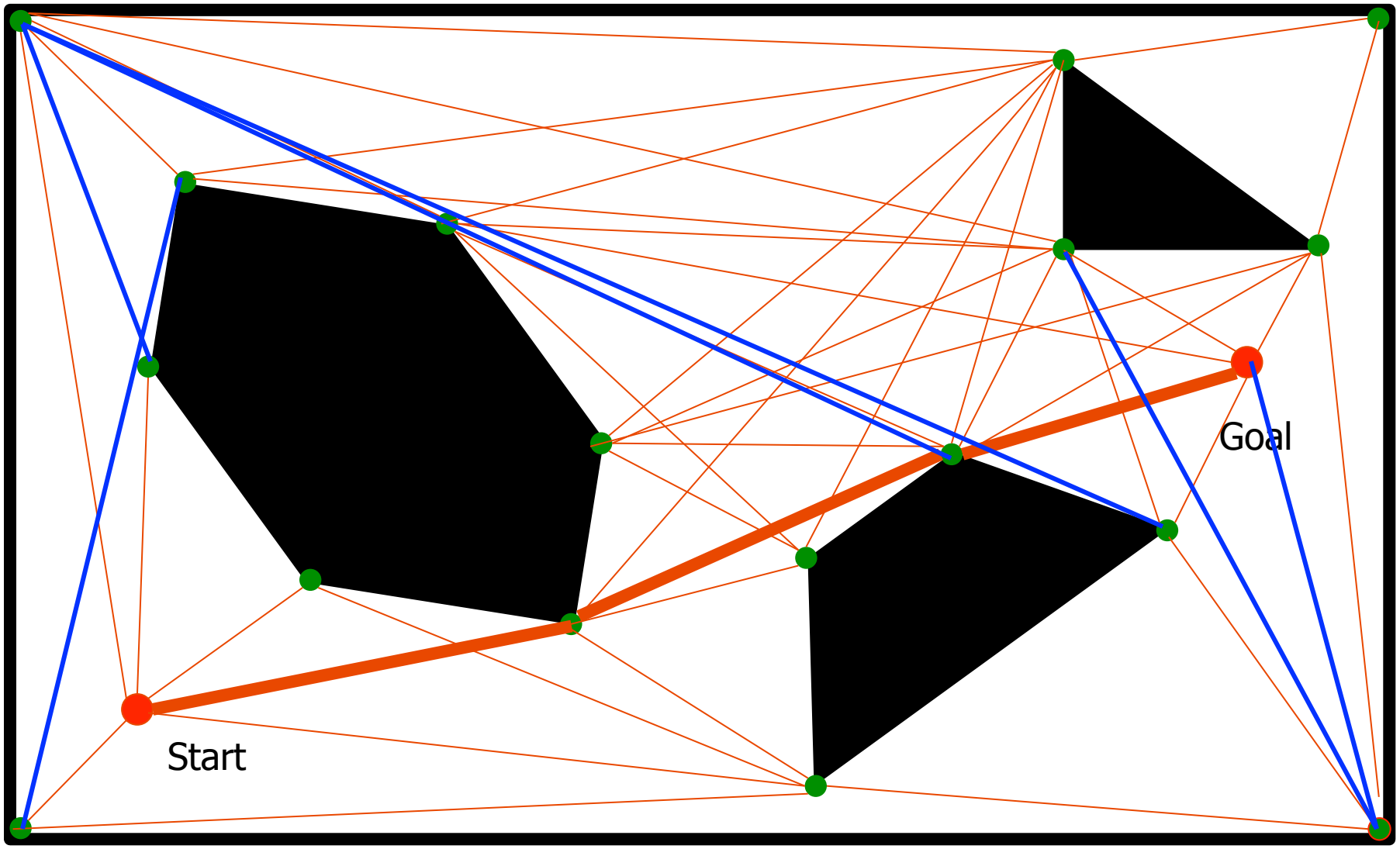
Visibility Graph

SECTION 2.4

Penn


Goal
Start


Goal
Start


Goal
Start

- **This visibility graph algorithm is actually complete. That is it will find a path if one exists and report failure if no path can be constructed. This could happen if the start or destination is surrounded by an obstacle.**

- **Moreover you can prove that this algorithm will actually construct the shortest possible path between the two points. You can see the intuition for this by thinking of the path between the two vertices as a piece of string, imagine what would happen if you pulled this string as tight as possible to eliminate all of the slack, the resulting trajectory would consist of a series of straight lines between vertices corresponding exactly to the edges of the visibility graph.**