This articles looks at how to solve 8-puzzle using the A\* algorithm and using Python. 8-puzzle is a physical puzzle where you have movable tiles and one empty slot. The goal is to move the numbered tiles around on the board until they are in order. The A\* algorithm can be used on this puzzle to automatically solve it.

Solving 8-Puzzle is different when a person is doing it and can be done with different approaches. There are four steps that get you to the goal node when solving this problem through a computer: 1.) get the current state, 2.) Find the available moves and their cost, 3.) choose the move with the least cost, and 4.) Check if it matches the goal state. If it doesn’t match the goal state repeat step 1. The program looks for the empty space and then which moves are valid and would have the least cost to perform. Because of this, it gets solved. The rest of the article shows how to code this in python and create a working program.

I think this is related to our course because it’s a way that A\* can be used outside of games. Artificial intelligence and the techniques we learn don’t need to necessarily only be used for games. It also deals with how to implement A\* to solve this in code.

G. (2012, June 10). 8-Puzzle solving using the A\* algorithm using Python and PyGame. Retrieved March 11, 2017, from https://www.codeproject.com/Articles/365553/Puzzle-solving-using-the-A-algorithm-using-Pytho