

Artificial Intelligence and some algorithms

Sometimes called machine intelligence, is the way that we can program a device or a computer to “think about something”, and how can we do that? Actually, exist several paradigms: “functional, logical, imperative, object oriented and declarative” but that story is for another time.

The most common paradigm used in programming artificial intelligence is functional, because you need to create the space for searching, and built the response ranges when someone ask something.

Have you ever thought about what happens when you search on Google?

How does that work?

It all starts with something called “Entropy of language”: Is the probability of use a letter or a word in a text, and it’s different for each language.

“I’ll get my computer to solve my problem”:

“If I can’t solve something fast, my computer can”

Now we need to think “how can the shipping companies deliver all the packages on time and saving money in the cost of transportation?”

That has a name: “problem of the traveling agent”

Now, we have some ways to solve it, but none of them is the perfect solution and I want to show you my favorite solution with a simple neural network

When we use neural networks, we need to create edges and nodes, the nodes have an id and the edges have a weight or cost of using them.

For example, if we want to buy a ticket for travel from Pereira to Miami, the nodes are Pereira and Miami so far and we have different prices, the prices are the edges, but we can find prices that involve other nodes for us a trip with scales, in that case may be Bogota, Medellín or Calí, after built that edges and nodes, we have a simple neural network that helps you choosing the best option to buy a ticket.

That’s a piece of cake, now we can say:

“If I had known artificial intelligence before, I could solve my problems faster”