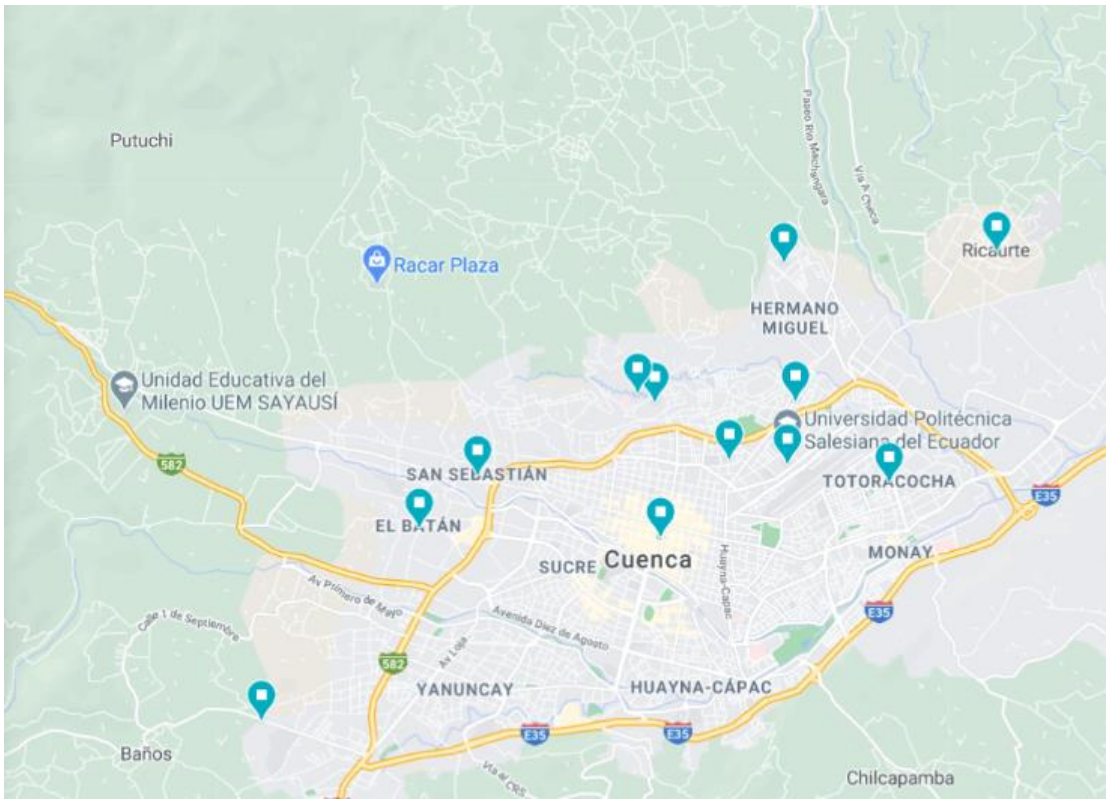
UNIVERSIDAD POLITECNICA SALESIANA

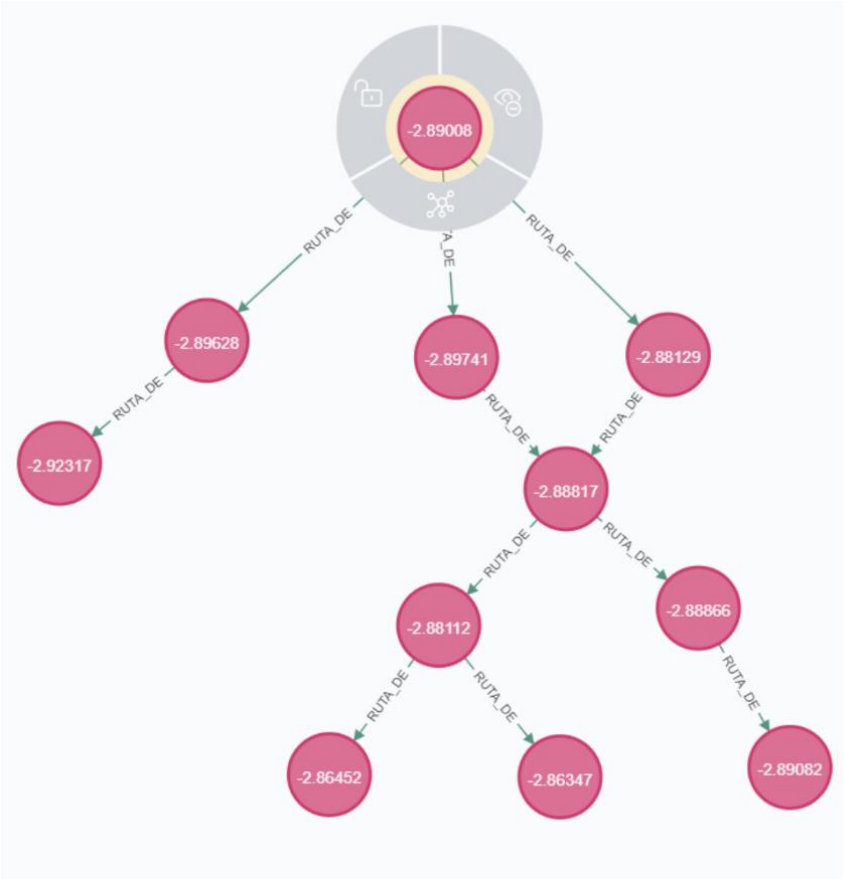
Nombre esteban Sibri

METODOS DE BUSQUEDA SIN RAZONAMIENTO

Búsqueda por Amplitud



Árbol de Nodos



Búsqueda por anchura

```
o4j$ CALL gds.graph.create('myGraph', 'Lugares', 'RUTA_DE', {
     relationshipProperties: 'costo' })
```

```
j$ CALL gds.graph.create('myGraph', 'Lugares', 'RUTA…
```

	nodeProjection	relationshipProjection	graphName	nodeCount	re
1	{ "Lugares": { "properties": { }, "label": "Lugares" } }	{ "RUTA_DE": { "orientation": "NATURAL", "aggregation": "DEFAULT", "type": "RUTA_DE", "properties": { "costo": { "property": "costo", "aggregation": "DEFAULT", "defaultValue":	"myGraph"	11	1

```
MATCH (San_Sebastian:Lugares{nombre:'San_Sebastian'}),
(Totoracocha:Lugares{nombre:'Totoracocha'})
WITH id(San_Sebastian) AS startNode, [id(Totoracocha)] AS
targetNodes
CALL gds.alpha.bfs.stream('myGraph', {startNode: startNode,
targetNodes: targetNodes})
YIELD path
UNWIND [ n in nodes(path) | n.nombre ] AS tags
RETURN tags
```

tags
"San_Sebastian"
"Bellavista"
"Parque_Calderon"
"El_Batan"
"Loja_Argelia"
"Baños"
"El Vecino"

Búsqueda por coste

```
MATCH (source:Lugares {nombre: 'San_Sebastian'}), (target:Lugares
{nombre: 'Totoracocha'})
CALL gds.beta.shortestPath.yens.stream('myGraphs', {
    sourceNode: id(source),
    targetNode: id(target),
    k: 3,
    relationshipWeightProperty: 'costo'
})
YIELD index, sourceNode, targetNode, totalCost, nodeIds, costs
RETURN
    index,
    gds.util.asNode(sourceNode).nombre AS sourceNodeName,
```

1	"San_Sebastian"	"Totoracocha"	6.10985	["San_Sebastian", "Parque_Calderon", "Loja_Argelia", "Misicata", "Totoracocha"]	[0.0, 2.57, 3.9499999999999997, 4.71985, 6.10985]

Siendo la ruta

San sebastian, Parque Calderon, loja Argelia, Misicata, Totoracocha

Búsqueda por profundidad

```
MATCH (San_Sebastian:Lugares{nombre:'San_Sebastian'}),
(Totoracocha:Lugares{nombre:'Totoracocha'})
WITH id(San_Sebastian) AS startNode, [id(Totoracocha)] AS
targetNodes
CALL gds.alpha.dfs.stream('myGraph', {startNode: startNode,
targetNodes: targetNodes})
YIELD path
UNWIND [ n in nodes(path) | n.nombre ] AS tags
RETURN tags
```

	tags
1	"San_Sebastian"
2	"El_Batan"
3	"Baños"
4	"Parque_Calderon"
5	"Loja_Argelia"
6	"Misicata"