Graph Databases with Python

Mark Henderson

Who am I?

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```
{
  name: Mark Henderson Sr.,
  occupation: Programmer/Manager @ DST,
  email: emehrkay@gmail.com,
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  twitter: emehrkay,
  github: emehrkay,
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  aim: emehrkay2
}
```

How we think about relationships

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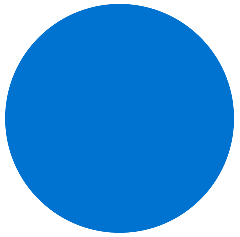

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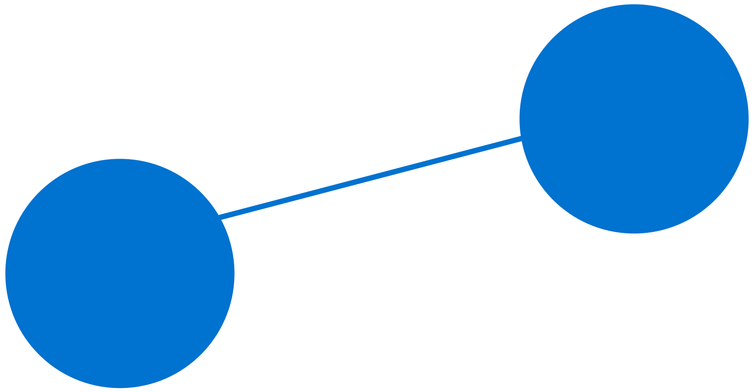

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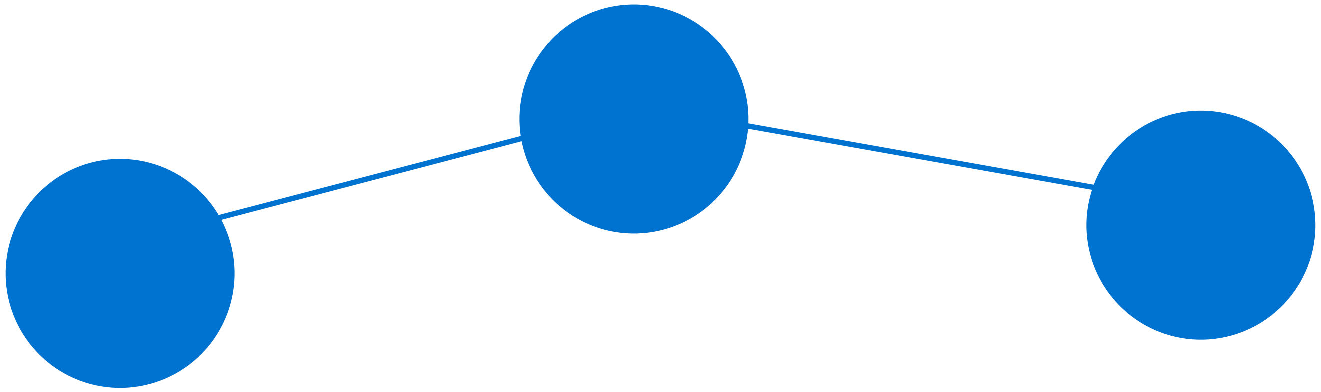

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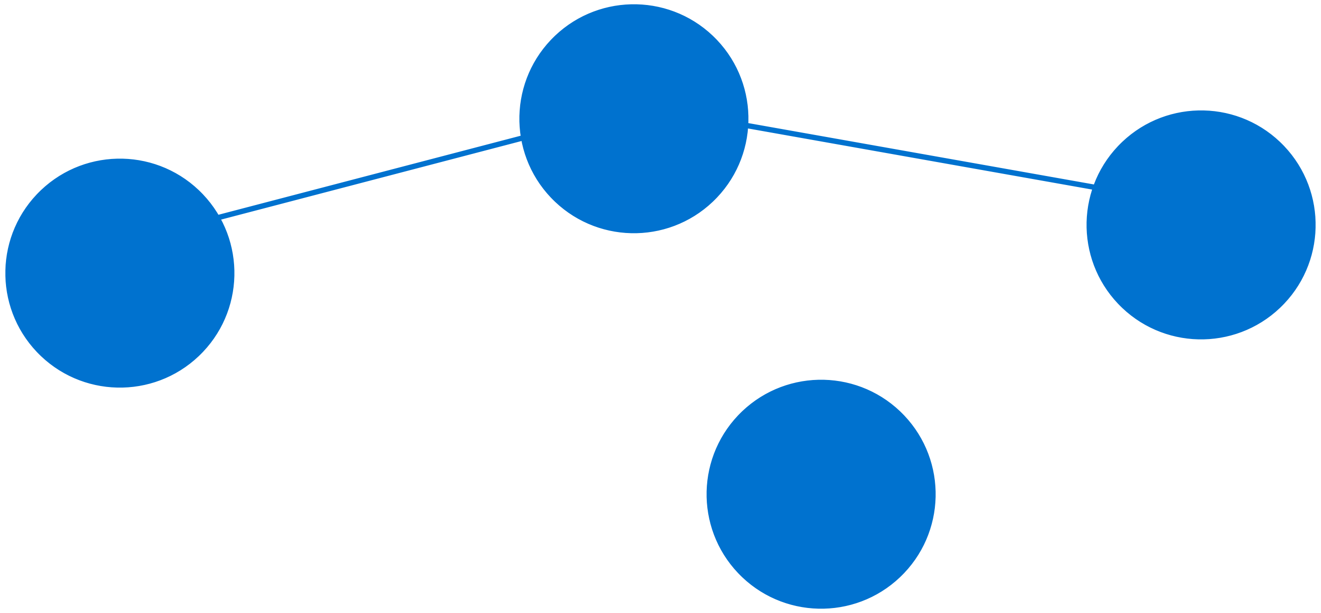

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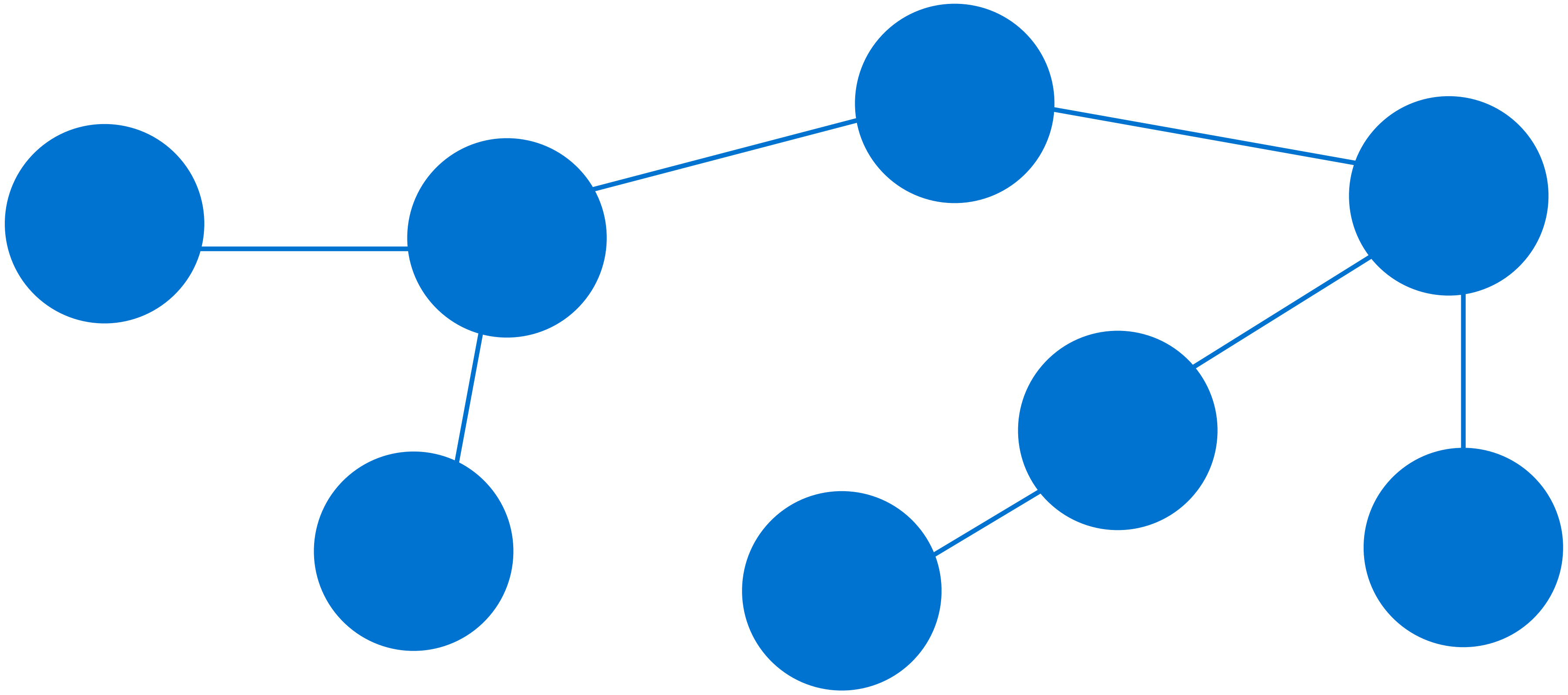

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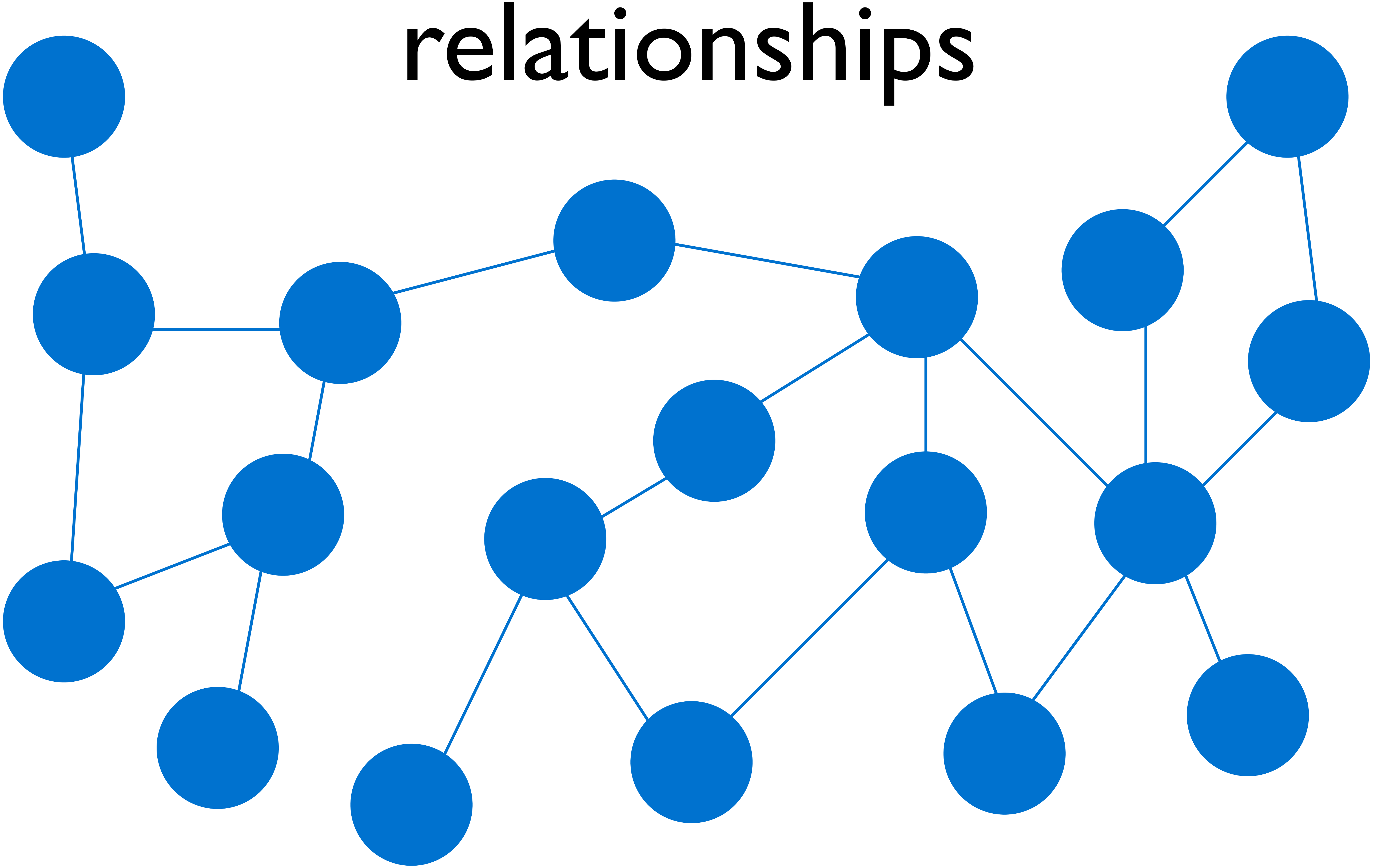

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Multigraph, Quiver, Weighted, Simple, Half/loose edge

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Full property graph. Java-based.

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Twitter's FlockDB (github.com/twitter/flockdb):

Shallow relationships. JVM-based.

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Tools for giving some sanity to working with graphs.

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Furnace, Pipes, Frames

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Native Python-Java bridge code

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OrientDB REST client

Bulbs (http://bulbflow.com)

Rexter or Neo4j REST client

Examples

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Connecting to neo4j

```
gdb = GraphDatabase("http://localhost:7474/db/data/")
```

Examples

Creating a node

```
n = gdb.nodes.create(color=‘Red’, width=16, height=32)
```

Examples

Creating a connection

```
n.relationships.create(‘KNOWS’, node2, **kwargs)
```

Examples

Finding nodes

```
nodes = Q(‘color’, exact=’RED’)
```

Examples

Traversing the graph

```
nodes = n.traverse(types=[client.All.KNOWS])[:]
```

Examples

Live Example

With class participation

Questions/Comments

Everything can be found at Github

Github.com/emehrkay/meetup-graph