
jwalk Documentation

Release 0.5.0

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jwalk performs random walks on a graph and learns representations for nodes using Word2Vec. It also has options to train existing models online and specify weights.

1.1 Install

```
pip install -U jwalk
```

1.2 Build

```
make build
```

1.3 Usage

```
jwalk -i tests/data/karate.edgelist -o karate.emb --delimiter=' '
```

To see the full list of options:

```
jwalk --help

Prompt parameters:
  debug:          drop a debugger if an exception is raised
  delimiter:      delimiter for input file
  embedding-size: dimension of word2vec embedding (default=200)
  has-header:     boolean if csv has header row
  help (-h):      argparse help
  input (-i):     file input (edge list or scipy adjacency CSR matrix)
  log-level (-l): logging level (default=INFO)
  model (-m):     use a pre-existing model
  num-walks (-n): number of random walks per graph (default=1)
  output (-o):    file output
  stats:          boolean to calculate walk statistics [requires pandas]
  undirected:     make graph undirected
  walk-length:    length of random walks (default=10)
  window-size:    word2vec window size (default=5)
  workers:        number of workers (default=multiprocessing.cpu_count)
```

1.4 Test

Running unit tests:

```
make test
```

Running linter:

```
make lint
```

Running tox:

```
make test-all
```

1.5 License

Apache License 2.0

1.6 References

- [paper]: arXiv:1403.6652 [cs.SI] “DeepWalk: Online Learning of Social Representations”
- [paper]: arXiv:1607.00653 [cs.SI] “node2vec: Scalable Feature Learning for Networks”

Changelog

2.1 Releases

2.1.1 v0.5.0 (2017-01-10)

- First upload to PyPI.

Indices and tables

- `genindex`
- `modindex`
- `search`