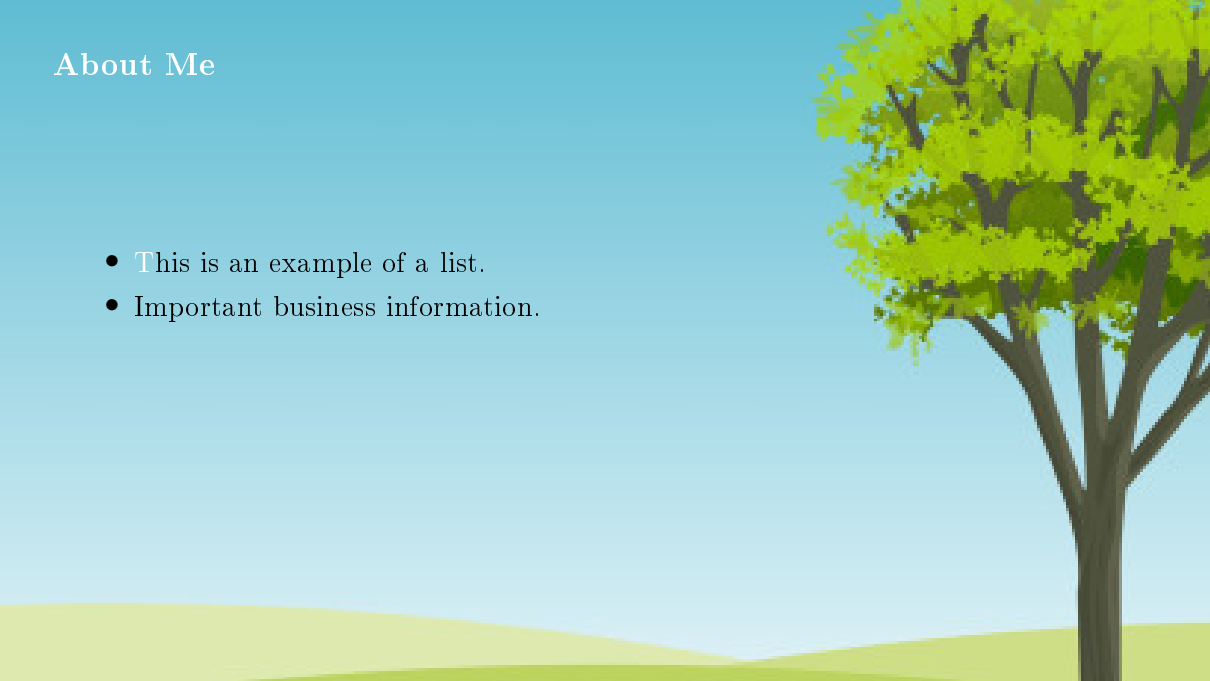
What I Learned About Deep Learning

Franklin Diaz, Cosmic Voyager

- Introduction
- The Goal
- The Journey
- Visualizations
- Sources and Citations

About Me

- This is an example of a list.
- Important business information.



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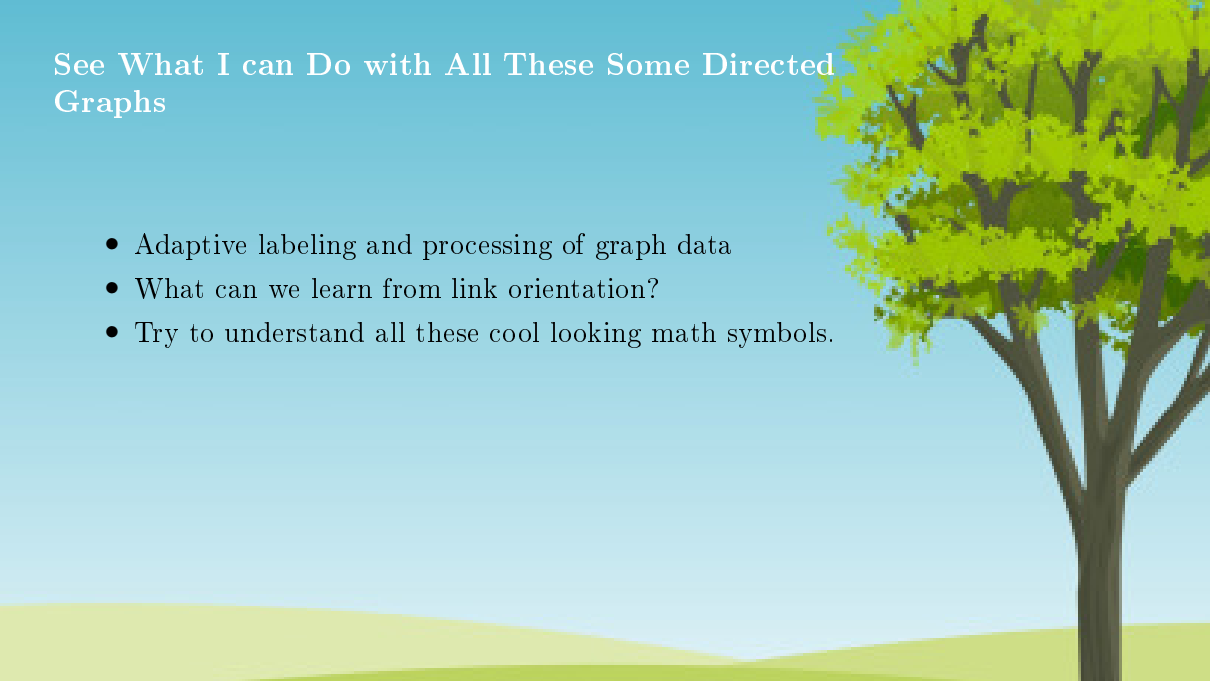
See What I can Do with All These Some Directed Graphs

- Adaptive labeling and processing of graph data
- What can we learn from link orientation?
- Try to understand all these cool looking math symbols.



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What Have I Gotten Myself Into?

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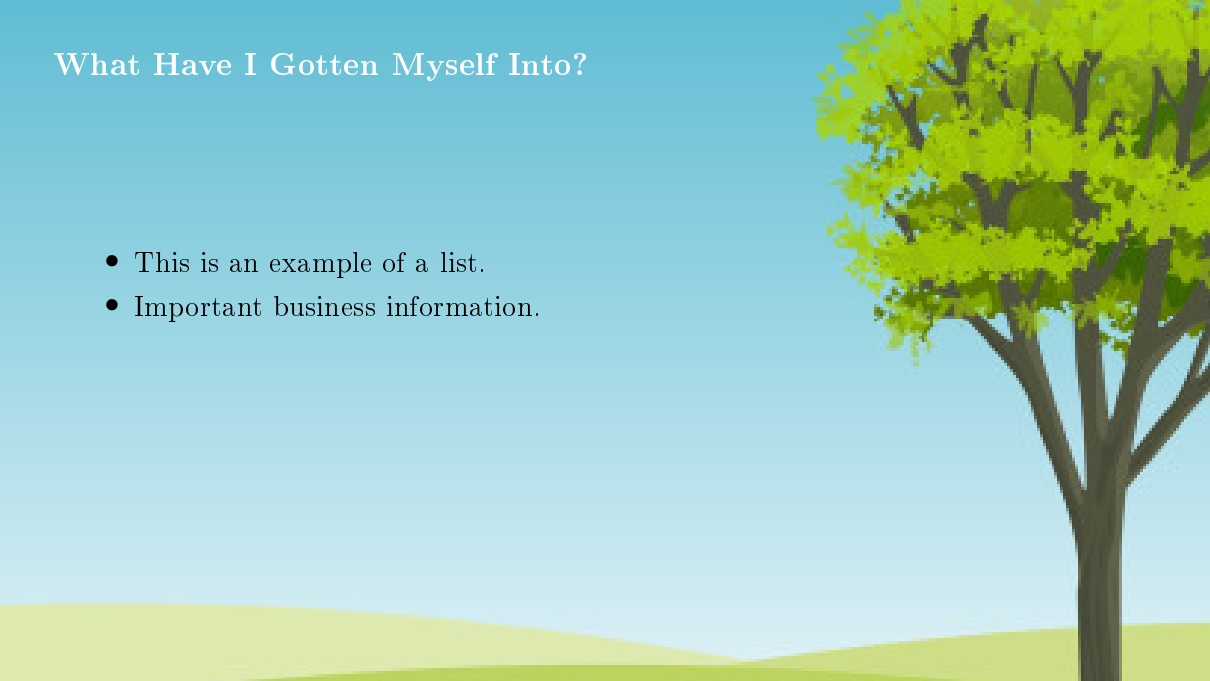
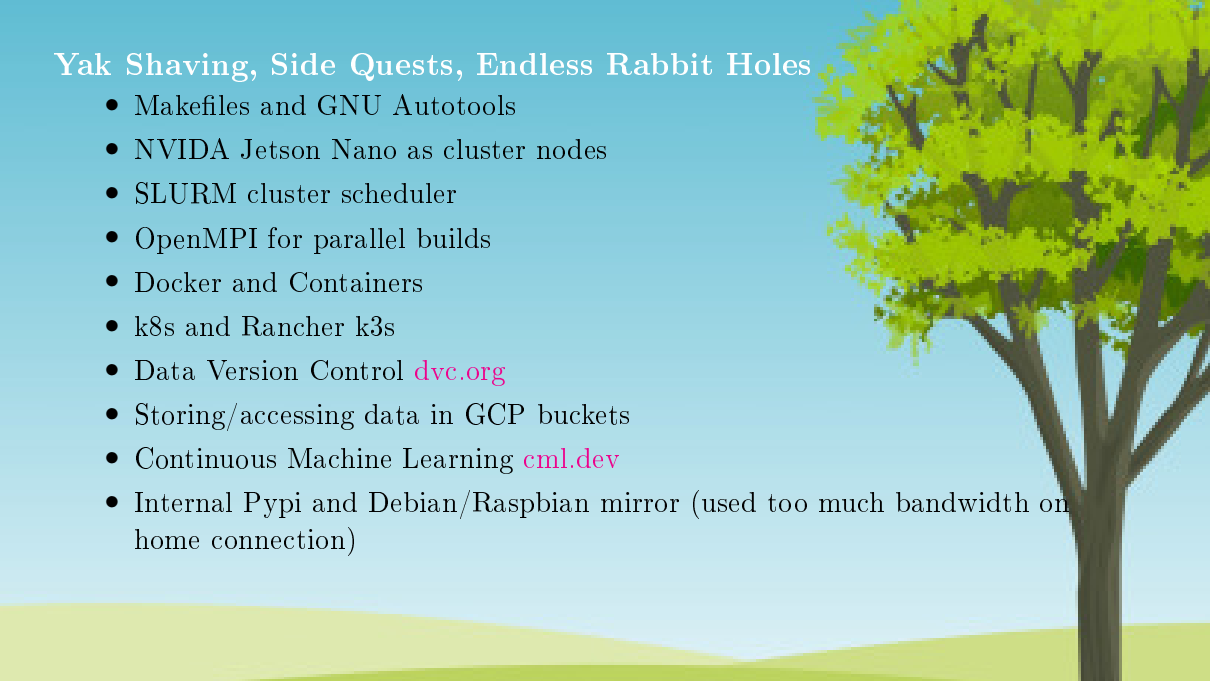


Yak Shaving, Side Quests, Endless Rabbit Holes

- Makefiles and GNU Autotools
- NVIDA Jetson Nano as cluster nodes
- SLURM cluster scheduler
- OpenMPI for parallel builds
- Docker and Containers
- k8s and Rancher k3s
- Data Version Control dvc.org
- Storing/accessing data in GCP buckets
- Continuous Machine Learning cml.dev
- Internal Pypi and Debian/Raspbian mirror (used too much bandwidth on home connection)

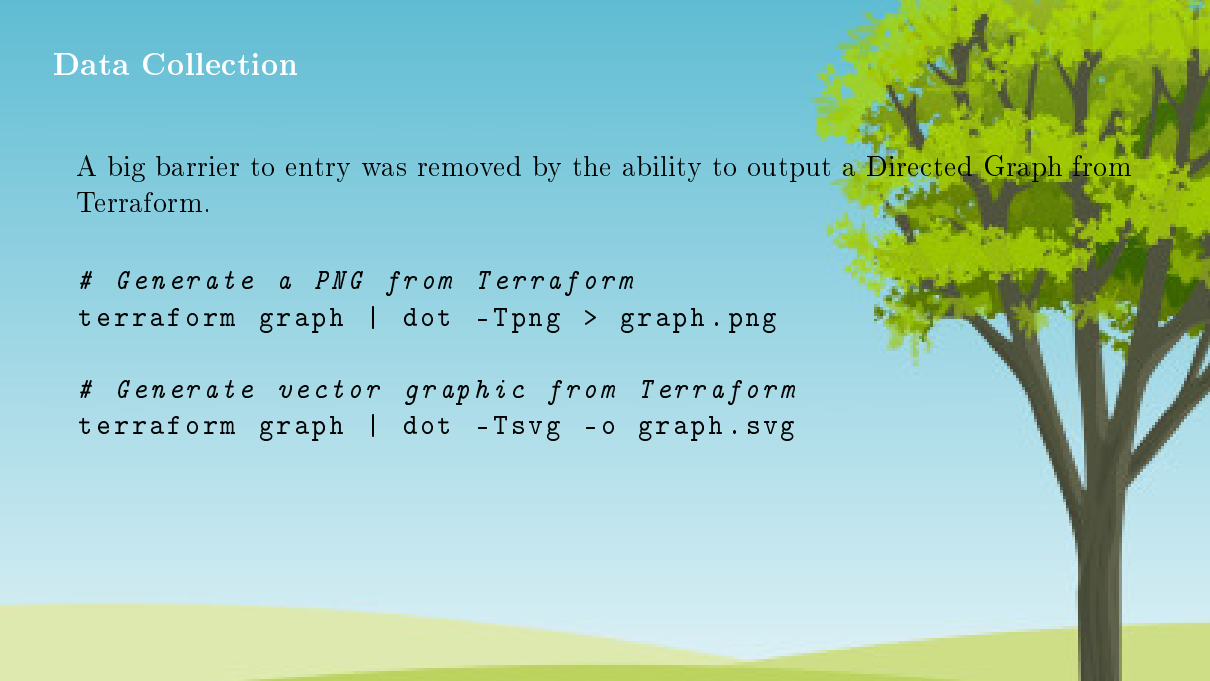


Data Collection

A big barrier to entry was removed by the ability to output a Directed Graph from Terraform.

```
# Generate a PNG from Terraform
terraform graph | dot -Tpng > graph.png

# Generate vector graphic from Terraform
terraform graph | dot -Tsvg -o graph.svg
```



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Graphviz/Dot output

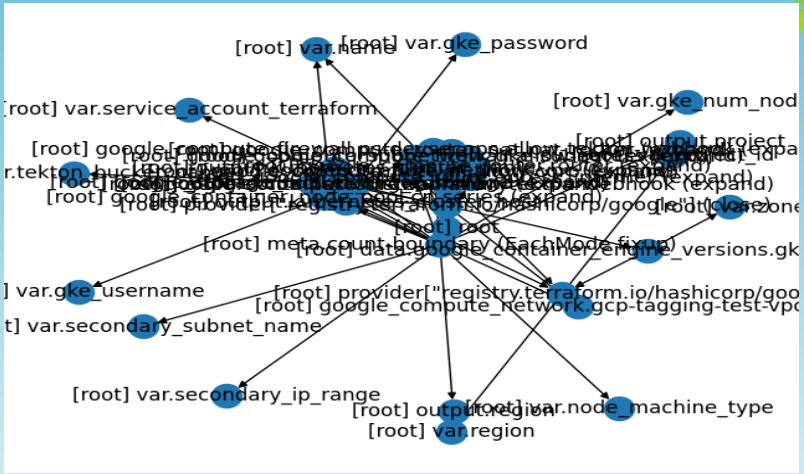

Figure:

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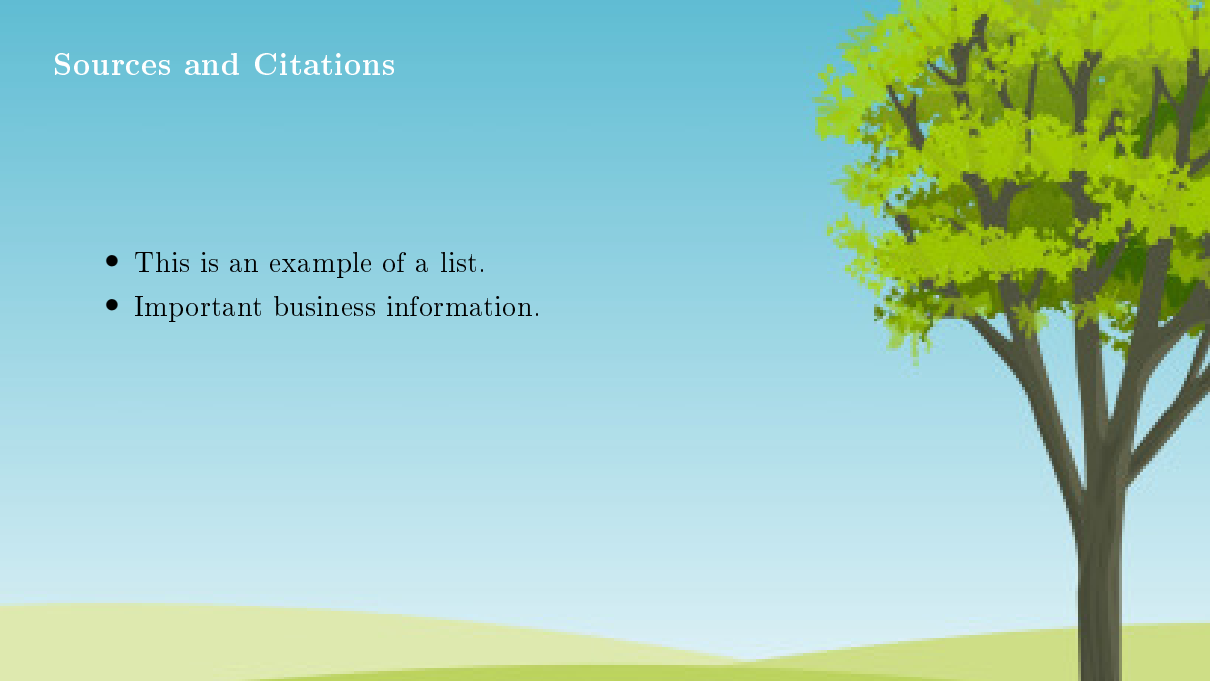
Sources and Citations

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