



Snake Charmer

The batteries-included
workbench for data science.

Portable. Powerful. Python.

<https://github.com/snake-charmer-devs/snake-charmer>

<http://andrewclegg.github.io/>

How it works

Your computer



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Snake Charmer virtual machine



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IPython notebook server, Pandas, NumPy, SciPy, Scikit-Learn, PyMC, Matplotlib, Seaborn, MPLD3, Statsmodels, Lifelines, NLTK, DEAP, Gensim, Cython, Numba, Theano, Numexpr, SymPy, PyTables etc. etc. etc.



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R, Octave, Stan, Vowpal Wabbit etc. (+ Python wrappers)



Four step installation

1. Install VirtualBox
2. Install Vagrant
3. Clone Snake Charmer repo
4. Type "vagrant up"

Whole environment built from Salt recipe.
Works the same on Windows, Mac or Linux.

Demo time!

Brace yourselves.

Other benefits...

- ❖ Reproducibility
- ❖ Disposability
- ❖ Safety
- ❖ Shareability
- ❖ Elasticity

No more bullet lists, I promise.

Reproducibility

Oblivious to hardware, OS, library differences.

Snake Charmer just doesn't care.

Disposability

"Treat your VMs like cattle, not pets"

If it gets sick, shoot it in the head.

Safety

Take a snapshot of whole environment --
Ubuntu, Python, your code, your data.

Try something experimental.

If it doesn't work, roll back to snapshot.

Shareability

Bundle up whole environment.

Send to colleagues. Share via Vagrant Cloud.

Build your own customized VM templates.

Elasticity

Sandbox resource usage on your poor laptop.

Or replicate your dev environment on a massive server farm.

"Write once, run anywhere"

Questions?

Find me here: <http://andrewclegg.github.io/>

Or here: https://twitter.com/andrew_clegg

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