

# Docker pour les ENSAE

## Python pour un Data Scientist

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# About me

- Data Scientist by day @VUble (my opinions are my own, not those of my employer)
- Unix enthusiast, hobbyist mobile (flutter) and web (django) programmer by night

# Outline

- Qu'est ce que Docker ?
- Try to make some code work
- Try one more time, with docker
- Some comparisons
- Some commands

# Essayer de déployer une application donnée

- télécharger le code source sur mon github
- le faire marcher sur votre pc
- Machine de Boltzmann Restreinte (RBM)
- Conclusion

# What if we try to do the same with Docker ?

- télécharger le code source sur mon github
- le faire marcher sur votre pc
- Machine de Boltzmann Restreinte (RBM)
- Conclusion

# Docker vs virtualEnv

- only python vs other applications
- interoperable
- installing isn't a nightmare
- much more easier to use

# Docker vs Virtual Machines

- Quicker to build, test and deploy
- Much, much, much, much more lighter (Gb vs tens of MB)
- More interoperabled

# How to use docker

- Download docker
- Add user to docker groups
- Write a dockerfile
- Build your image
- Launch a container
- Start to work !



- Download docker
- Add user to groups (sudo add romaric docker on unix)
- Write a dockerfile
- Build your image
- Launch a container
- Start to work ![?].

# Not far from ideal for Data Engineers/Scientists

- Mostly small BATCH ETL Jobs
- Micro services are truly adapted to our workloads
- Containerized algorithms
- Plenty of dockerfiles online !
- Launch a container
- Start to work ![?].

# Reproduction des résultats

## Résultats



**Figure:** *Génération de 25 images*

**Table:** *Hyperparamètres*

learning rate	0.005
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# TLDR




- Docker is great !
- Better, Faster, Stronger applications and projects !

# What's next ?

- Write dockerfiles, build images and launch containers !
- KUBERNETES, Docker Swarm, Mesos when dealing with production in tech firms :)

That's all Folks !

# Bibliographie

-  Simon G., Vivien P., ingénieurs système, VUble
-  Documentation officielle Docker.
-  Will Sargent, Cheat Sheet docker