Carpentries Beyond the Basics

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Program of courses for 2021

- One course per week
- Interspersed with basic Unix shell, Git, Python and HPC courses
 - Unix Shell Extras
 - Introduction to Reproducible Environments using Docker Containers
 - Introduction to Conda for (data)scientists
 - Introduction to Machine Learning with Scikit-Learn

Still to run

- Introduction to Deep Learning with Keras
- Intermediate Research Software Development
- Data Management with SQL
- Introduction to Reproducible Environments using Singularity Containers
- Intermediate Git

Experiences

- Shell Extras lesson was very incomplete.
 - My improved version https://scw-aberystwyth.github.io/shell-extras/
- Docker lesson very good and nearly complete.
- Anaconda lesson also good, last section on GPUs was a little less coherent and less relevant to some attendees.
- Machine learning my own incubator lesson. Good excuse to do some work on it.

Training Courses on Demand

- Avoiding trying to second guess what people are interested in.
- Google form asking for:
 - Basic contact details
 - Which courses are of interest
 - Times/days you are typically available

AIMLAC CDT Training

- Artificial Intelligence, Machine Learning and Advanced Computing CDT.
 - Aber, Bangor, Bristol, Cardiff and Swansea Universities.
- Carpentries based workshops for each incoming group in November, January, April and June.
 - November: Unix Shell (subset), Git, HPC, Performant Numpy
 - January: Web APIs, Docker, SQL
 - April: Binder and Reproducibility, Testing and Continuous Integration
 - June: Object Oriented Python