
Your Technical Portfolio

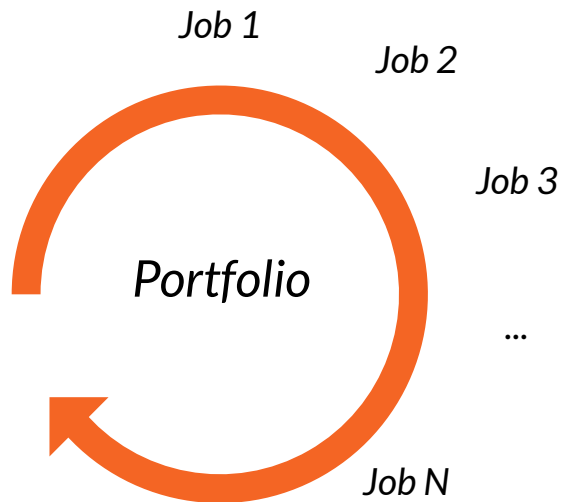
Suggestions from a sometime hiring manager ...

Starting the cycle ...

It's always easier to get your next technical job once you already have one.

This talk is all about what to do when:

1. You don't have official experience to fall back on ("I need my first job")
2. Your experience isn't quite matched to what you want ("I want a different job")
3. You want to show what you can do and have fallbacks to discuss in interviews ("I can do **this** job!")





A Wee Story ...

I got my first job in data by rocking up to a start-up in Glasgow and saying 'I'm good, use me ...'

Confidence

My portfolio made me confident I could show what I knew!

Preparation

I knew that some things I had worked on could be adapted to the companies use cases if asked

Trust

The company then had trust in what I was saying ...

—

Should I only show finished
work or stuff I know inside
out?

No! Absolutely not ...

(Or you'd never have anything to show)

Andy's GitHub Deep Dive ...

The screenshot shows Andy McMahon's GitHub profile. The 'Repositories' tab is selected and highlighted with a red box. A red arrow points from this box to the first checklist item. The 'Pinned' section is also highlighted with a red box, with a red arrow pointing from it to the second checklist item. The 'Contribution activity' section is highlighted with a red box, with a red arrow pointing from it to the third checklist item. The profile includes a profile picture, name, bio, and a list of organizations.

Search or jump to... Pull requests Issues Marketplace Explore

Overview **Repositories 52** Objects Packages

Pinned

- ML_playground**
Jupyter Notebook
- presentations**
Public presentations I've given....
- scala**
Playground for scala scripts etc
- Spark_playground**
Playground for learning how to do analyses using Spark (most projects are interfaced to Python).

35 contributions in the last year

Contribution activity

- Created 16 commits in 1 repository
[AndyMc629/machine-theory-of-mind](#) 16 commits
- Created 1 repository
[AndyMc629/machine-theory-of-mind](#)

My (hiring manager) checklist ...

1. Has this person ever used GitHub in their life?
2. What have they pinned/what are they particularly proud of?
3. What have they worked on recently?

Andy's GitHub Deep Dive ...

Overview Repositories 52 Projects Packages

python

12 results for repositories matching python

Spark_playground
Playground for learning how to do analyses using Spark (most probably interfaced to Python).
Jupyter Notebook Updated on 9 Nov 2019

pypercarlo
HyPerCarlo is going pythonic!
physics-simulation monte-carlo-simulation python-2
Python Updated on 28 Apr 2019

phd_scripts
Short python script to read in a molecular structure and calculate the three principal moments of inertia of the molecule. This is useful for

Repository Structure

There are a few pieces to this project so I suggest the repo will be structured roughly like this [example](#). Note this will be added to as the project progresses and should by no means be considered complete.

```
-- README.md
-- notebooks
-- docs
-- data
-- gridworld
-- agents
-- mindlab
-- __init__.py
-- models
-- nets
-- character
-- mental
-- prediction
-- simulation
-- __init__.py
-- environments
-- gridworld
-- agents
-- random.py
-- greedy.py
-- deeprl.py
-- util
-- __init__.py
-- preprocess
-- spatcon.py (perform spatialisation concatenation, take actions from sims and tile o
```

```
1 #!/usr/bin/env python2
2 # -*- coding: utf-8 -*-
3
4 Created on Sun May 14 11:09:23 2017
5
6 @author: andrew
7
8 Attempt at building a generic simulation class using the ALPS library.
9
10
11
12 import math
13 import pygals
14 import pygals.scales as alpscales
15 import pygals.pytools as alpspytools
16
17 import pygals.plot
18
19 import spin
20
21 #import random # for direction moves
22
23 class Simulations:
24     # Seed random number generator: self.rng() will give a random float from the interval [0,1)
25     rng = alpspytools.rng(42)
26
27     def __init__(self, beta, L, model=None):
28         # Init size and temp
29         self.L = L
30         self.beta = beta
31         # Init random spin configuration
32         self.spins = [ (spin, spin[sx*0.8, sy*0.8, sz*2+1]) for j in range(L)] for i in range(L) ]
33         # Init observables
34         self.energy = alpscales.RealObservable('E')
35         self.magnetization = alpscales.RealObservable('M')
```

My (hiring manager) checklist (cont) ...

4. Have they written anything in the language they told me they know?
5. How much have they written or just forked?
6. Do their projects tie in with their stated level of experience*

*for example if you say you are a world-class developer I expect to see excellent application structure, packaging, modularisation, advanced techniques... Otherwise, don't worry

Andy's GitHub Deep Dive ...

Your (interviewee) checklist ...

1. Which project(s) can I talk about all day?
2. Which are relevant to my application and desired role?
3. What technologies have I used that I can discuss in depth?

README.md

machine-theory-of-mind

This repo contains the code and technical documentation for a project between a few people (see 'People') whose aim is to reproduce and add to the study in the [Machine Theory of Mind](#) paper from DeepMind.

Technologies

The DeepMind implementation doesn't mention specific technologies used, so I have made the following selection (subject to change as the project develops)

- Python
- Tensorflow
- Google Colab
- OpenAI Gym (for at least simple agents and worlds)
- DeepMind [AI Safety GridWorlds](#)

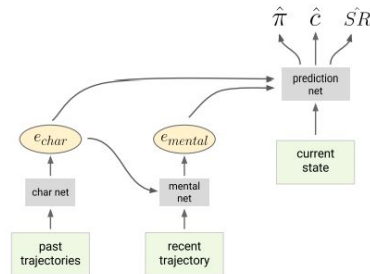
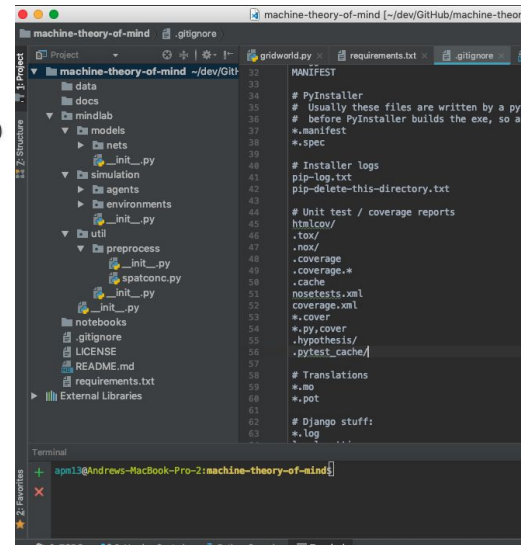


Figure 1. ToMnet architecture. The character net parses an agent's past trajectories from a set of POMDPs to form a character embedding, e_{char} . The mental state net parses the agent's trajectory on the current episode, to form an embedding of its mental





Tips

Where should I start?

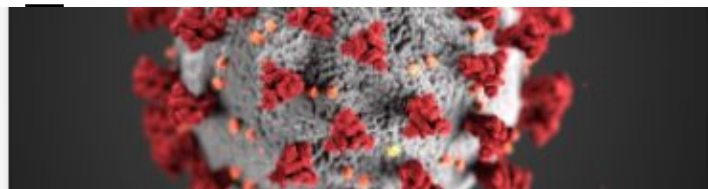
Start Small

We're all human and have commitments, you don't have to build an Enterprise data platform in your spare time ...

Even a small Python script that retrieves and plots some data is great

Get Excited!

Do something that interests you, you'll be more likely to get somewhere and your passion will come across in an interview (always a bonus!)



Whoa There! The Data Community and Covid-19

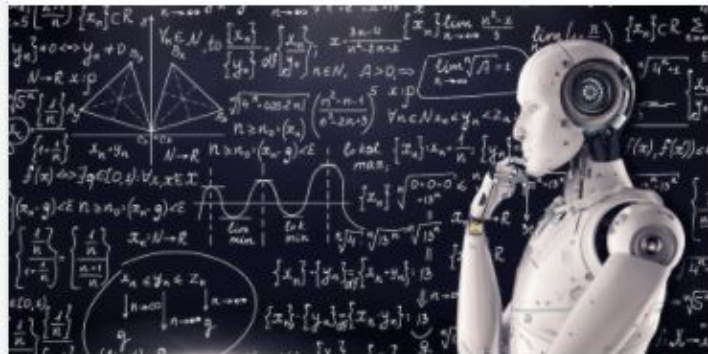
Andy McMahon on LinkedIn

March 25, 2020

31 · 2 Comments

78 views of your post in the feed

Andy McMahon posted this



How to Make Your Analytics Project a Success (Hint: It's Not Tech!)

Andy McMahon on LinkedIn

July 13, 2019

8 · 1 Comment

What else?

Blog posts ...

Talks and presentations ... even the ones you haven't given yet!

AndyMc629 / presentations

<> Code

Issues

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

master

1 branch

0 tags

Go to file

Add file

Code



AndyMc629 Add files via upload

76403b5 on 17 Dec 2019

5 commits



images

Add files via upload

8 months ago



Value Driven Analytics.pdf

Add files via upload

8 months ago



hyndland-christmas-lecture-2019-...

Add files via upload

8 months ago



pydata_april_2018_ml_microservice...

Add files via upload

8 months ago

Good Luck!

Your portfolio is only a small part of the story, at the end of the data **people hire people**

Things that sway me:

- Passion and excitement
- Hunger
- 'Can do' attitude
- Friendliness and kindness
- Optimism

