
25th PyData *Bristol*



— 20th July 2023 —

Alon Samuel, Alistair Rogers
James Yarrow, Gregory Daly

NUMFOCUS
OPEN CODE = BETTER SCIENCE



ADLIB



NumFOCUS: Open Code = Better Science

- Non-profit supporting key open source scientific computing projects
- Sponsored projects include Jupyter, Pandas, NumPy, Matplotlib
- PyData, community educational and engagement programme

<https://numfocus.org/>





NUMFOCUS
OPEN CODE = BETTER SCIENCE

Members
211,251

Groups
219

Countries
76

PyData Bristol: Established 2018, 1,202+ members!

The organisers



 **James**
@Yarrow



Lenka
@LenkaHas



Alistair
@alistairlr112



Valerio
@leriomaggio



Greg
@greg_daly



Neil
@n_andrassy



Alon
@AlonSamuel1

Our Sponsors :)



Cookpad welcomes you to our Kitchen.

Our mission is to make everyday cooking fun!





Want to help? Check out our roles at cookpad.workable.com, or download our app and get cooking!

Our Sponsors :)

ADLIB



PyData Bristol - Event tonight

6:30	 Intro to PyData Bristol	PyData Organisers
6:40	Python emulation of the NES's MOS6502 processor	Dr David Kersh
7:10	Break (pizza and drinks)	
7:40	 Coding with ChatGPT	Alon Samuel
7:55	 Data Platforms : ETL to ELT to layered	James Yarrow
8:20	Community Announcements	
8:30	 Networking and drinks	Nearby pub: The Sidings

Speaking @ PyData Bristol

<https://bit.ly/pydata-bristol-speaker>



<https://github.com/pydatabristol>

📖 README.md

PyData Bristol Meetups

Links:

- [PyData Bristol on Meetup.com](#)
- [@PyDataBristol on Twitter](#)
- [PyData Bristol YouTube Channel](#)

Past meetups

- [10th PyData Bristol meetup Sep 2019](#)
- [11th PyData Bristol meetup Oct 2019](#)
- [12th PyData Bristol meetup Nov 2019](#)
- [13th PyData Bristol meetup Dec 2019](#)
- [14th PyData Bristol meetup Jan 2020](#)
- [15th PyData Bristol meetup Feb 2020](#)
- [Joint PyDataUK and 16th PyData Bristol meetup May 2020](#)
- [17th PyData Bristol meetup Oct 2022](#)
- [22nd PyData Bristol meetup Apr 2023](#)

PyData Bristol Workshops

Links:

- [PyData Bristol on Meetup.com](#)
- [@PyDataBristol on Twitter](#)
- [PyData Bristol YouTube Channel](#)

Workshops

You can find slides and code for our workshops below:

- [Intro to Deep Learning with Keras \(20th Sep 2018\)](#)
- [Intro to Recurrent Neural Networks \(13th Nov 2018\)](#)
- [First Steps with Python \(28th Oct 2019\)](#)
- [Introduction to Python \(23rd Jan 2020\)](#)
- [First Steps with pandas \(27th Feb 2020\)](#)

Schedules, slides and recordings of previous events can be found in

What to speak about @ PyData Bristol?



Upcoming local events

Data Bristol *Meetup* 27th of July (Amdaris)

PyData Bristol *Meetup* August Social TBC (TBC)

Data Relay Bristol *Meetup* 4th October (Future Inn)

<https://twitter.com/pydatabristol>

Conference Updates

- **PyCon Israel 2023** Ramat Gan, July July 4-5
 - <https://2023.pycon.org.il/>
- **SciPy 2023** Austin, Texas, July 10-16
 - <https://www.scipy2023.scipy.org>
 - Program announced this week
- **EuroSciPy 2023** Basil, Swiss, Aug 14-18
 - <https://euroscipy.org/2023/>
 - 2 days of Sprints + 2 days of Talks / Posters
 - Maintainer Track & PyData Sprints
- **PyCon UK 23** Cardiff, Sept 22-25
 - <https://dev.events/conferences/py-con-uk-cardiff-8-2023>
 - Call for proposals close - 17:00, June 30.
- **2nd CardiffNLP workshop** Cardiff June 26-27
 - <https://www.cardiffnlpworkshop.org/home>
 - Registration closed

Package of the Month: frouros

Family of drift detection models -
<https://github.com/IFCA/frouros>

```
# Detector configuration and instantiation
config = DDMConfig(warning_level=2.0,
                   drift_level=3.0,
                   min_num_instances=30,)
detector = DDM(config=config)

# Simulate data stream (assuming test label available after prediction)
for i, (X, y) in enumerate(zip(X_test, y_test)):
    y_pred = pipeline.predict(X.reshape(1, -1))
    error = 1 - int(y_pred == y)
    detector.update(value=error)
    status = detector.status
    if status["drift"]:
        print(f"Drift detected at index {i}")
        break

>> Drift detected at index 44
```

● F

org/polyfactory

AI or Python News

- Train LLM on google colab ([Petals](#))!!! - [link](#)
- Llama2 has been released by Meta as open source* - <https://ai.meta.com/llama/>
- Keras Core - Keras is going back to multi-backend with Tensorflow, Pytorch and JAX - https://keras.io/keras_core/
- GPT3.5 and GPT-4's behaviour/performance changes over time - <https://arxiv.org/abs/2307.09009>

*as long as you're not FAANG

~~ChatGPT*~~ ~~HuggingChat~~ Llama2 nonsense of the month

```
(pytorch_2_01) greg@turing:~/llama2_hf$ /home/greg/miniconda3/envs/pytorch_2_01/bin/python hf/ht_text_test.py
```

Can you generate some nonsense for me to read to a meetup audience? About Python please

. Sure, here's some nonsense about Python that you can read to a meetup audience: "Python is a magical language that can make your computer dance with joy. It's like a box of chocolates - you never know what you're gonna get, but it's always delicious. With Python, you can build a website, create a game, or even summon a dragon (just kidding about that last one, sorry). Did you know that Python is secretly a ninja? It's true! It's always sneaking up on you with its flexible syntax and stealthy semantics. But don't worry, it's a friendly ninja that only wants to help you build awesome things. So come on down to our meetup and learn the ancient art of Python-fu. Together, we can create something truly amazing and maybe even have some fun along the way." I hope that helps! Let me know if you need anything else.

*No more
pro-ChatGPT
Nonsense Bias

~~ChatGPT*~~ ~~HuggingChat~~ Llama 2 nonsense of the month

```
(pytorch_2_01) greg@turing:~/llama2_hf$ /home/greg/miniconda3/envs/pytorch_2_01/bin/python hf/ht_text_test.py
Can you praise a speaker in a python meetup in a humorous way
? Answer: Of course! Here's a humorous introduction for a speaker at a PyData
meetup: "Ladies and gentlemen, please welcome our next speaker, the one and
only [Speaker's Name]! This data wizard has been conjuring up insights and
visualizations like a magician on a mission. When they're not busy taming
datasets, they enjoy hobbies like rock climbing, playing the guitar, and cooking
up a storm in the kitchen. But don't worry, they won't be serving any of their
famous dishes today - we're here for the data, not the food coma! So sit back,
relax, and get ready to learn from the master of data magic!"
?
```

P.S. I didn't say
where we
are...

This aerial map shows a walking route in Bristol, starting from Temple Meads station and heading north through the city center. The route is marked with a blue dotted line. Key locations along the way include Sainsbury's Local, NatWest Accelerator, and the Leonardo Hotel. Distance markers indicate a 15-minute walk (1.1 km) and a 12-minute walk (900m) from the station. The map also shows major roads like the A4044 and A4, and various landmarks such as the Temple Meads Quay and the Temple Back.

