BayesAI Workshop: Programme

Lancaster University Management School, Lancaster University, LA1 4YX
23rd to 26th September

Monday 23rd September – Lecture Theatre 1, Management School

12.30-13.30 Registration & Lunch

13.30-15.00 Sid Jaggi: *Group testing: A survey*
Kate Smith-Miles: *Optimization in the Darkness of Uncertainty: when you don't know what you don't know, and what you do know isn't much!*

15.00-15.30 Break

15.30-17.00 Chris Oates: *Reinforcement Learning for Adaptive MCMC*
Jose Miguel Hernandez-Lobato: *Accelerating Relative Entropy Coding with Space Partitioning*

17:00–18:30 Drinks Reception and Poster Session, hosted by the STOR-i CDT, held in the Management School

Tuesday 24th September – Lecture Theatre 1, Management School

9.00-10.30 Vincent Dutordoir: *Geometric Stochastic Processes with Denoising Diffusion Models*
Sam Power: *Gradient Flows for Statistical Computation - Trends and Trajectories*

10.30-11.00 Break

11.00-12.30 Angus Phillips: *Particle Denoising Diffusion Sampler*
Samuel Kaski : *Probabilistic modelling for collaborative AI for probabilistic modelling*

12.30-13.30 Lunch

13.30-15.00 Ciara Pike-Burke: *Goal-Conditioned Hierarchical Reinforcement Learning*
Omar Rivasplata: *PAC-Bayesian Computations*

15.00-15.30 Break

15.30- 17.00 Jonas Latz: *Losing momentum in continuous-time stochastic optimisation*
Nikolas Nusken: *Go with the flow*

Wednesday 25th September – Lecture Theatre 17, Management School

9.00-10.30 Katerina Karoni: *Adaptive and nonlinear damping for model training*
Chris Nemeth: *TBC*

10.30-11.00 Break

11.00-12.30 Arthur Gretton: *Wasserstein Gradient Flow on the Maximum Mean Discrepancy*
Theresa Smith: *Gaussian process models for pollution in rivers*

12.30-13.30 Lunch

13.30-15.00 Jared Tanner: *Deep neural network initialisation: Nonlinear activations impact on the Gaussian process*
Thomas Pinder: *Geospatial Modelling with Gaussian Processes and GPJax*

15.00-15.30 Break

15.30-16.15 Daniela de Angelis: ~~*TBC*~~ Towards AI-powered spatial-temporal epidemic forecasts

19:00 Workshop Dinner – Private Dining Room, County South, north campus

Thursday 26th September – Lecture Theatre 1, Management School

9.00-10.30 Hao Ni: *PCF-GAN: generating sequential data via the characteristic function of measures on the path space*
Henry Moss: *Return of the Latent Space Cowboys: Rethinking the use of VAEs in Bayesian Optimisation over Structured Spaces*

10.30-11.00 Break

11.00-12.30 Theo Damoulas: *Generating Origin-Destination Matrices in Neural Spatial Interaction Models*
Richard Turner: *Aardvark weather: end-to-end data-driven weather forecasting*

12.30-13.30 Lunch and close

Location and getting here:

Lancaster University's main campus at Bailrigg is on the A6 just south of the city of Lancaster. It is close to junction 33 of the M6 motorway, or a short bus ride from Lancaster railway station. On entering campus via Bigforth Drive, turn right at the roundabout for the Management School.

Postcode: LA1 4YX

Public Transport
100, 1, 1A buses serve city centre and campus. £2 for a single fare which is reduced down to £1 after 7pm. 1 and 1A take the most direct route.

Taxis
There is only one uber driver serving Lancaster so it's best to call a taxi company such as:

- 848 848 Radio Taxis - 01524 848848
- 32090 Taxis - 01524 32090

(However, buses run until late and are usually the better option)

The workshop is being held in Lancaster University Management School, which can be accessed from the main entrance on South Drive (campus map is at the back of this pack)

Whilst on campus:

Campus Catering:

- Pizzetta Republic - Pizza, wraps, **best coffee on campus**
- Sultan Experience - Curries, kebabs, burgers
- Marketplace - Cafeteria style food
- Wok Inn - Noodles
- Fylde bar
- Lancaster House Hotel

Food in Lancaster:

- Aquila Pizza - primarily takeaway
- Gastro pubs - White cross and The Sun
- Herberium - vegan friendly cafe with dinner service
- Misso Lounge
- Buccelli's
- Aroma Chef

Recommended Pubs

- Stonewell for craft beer
- The Whitecross and Waterwitch canal side pubs
- The Pub
- Campus option - Fylde bar