

PathLAKE Masterclasses

on

Data Science for Computational Pathology



PathLAKE
Computational Pathology Excellence

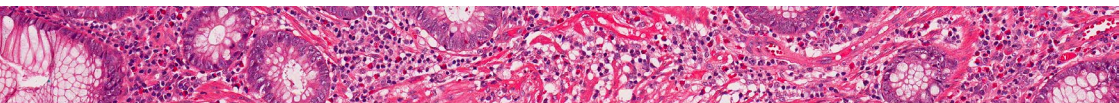
PROGRAMME

Monday 20th January 2020

Time	Day 1 - Monday 20 th January 2020	Speakers
8:15 - 8:45	Registration	
8:45 - 09:00	Opening Speech	Jo Martin (President, Royal College of Pathologists, UK)
9:00 - 9:15	From the viewpoint of a Cancer Patient Advocate	Derek C Stewart , OBE
9:15 - 9:30	Introduction to PathLAKE and Overview of the Masterclasses	Nasir Rajpoot (Warwick, UK) & David Snead (UHCW, UK)
9:30 - 11:10	AI Fundamentals: Basics of Image Analysis & Classical Handcrafted Features	Abhir Bhalerao (Warwick, UK) & Cheng Lu (CCIPD, USA)
11:10 - 11:30	Refreshments	
11:30 - 12:50	Basic Histopathology & Digital Pathology	Ali Khurram (Sheffield, UK) & Jakob Kather (Aachen, Germany)
12:50 - 13:30	Lunch Break	
13:30 - 15:00	AI Fundamentals: Introduction to Classical ML and Deep Learning	Andrew Janowczyk (CCIPD, USA) & Scott Doyle (SUNY Buffalo, USA)
15:00 - 15:40	CPath Fundamentals: CNNs for Classification	Korsuk Sirinukunwattana (Oxford, UK)
15:40 - 16:00	Refreshments	
16:00 - 18:00	AI Fundamentals: Hands-on workshop on ML and DL for pathology images	Abhir Bhalerao (Warwick, UK) & Andrew Janowczyk (CCIPD, USA)

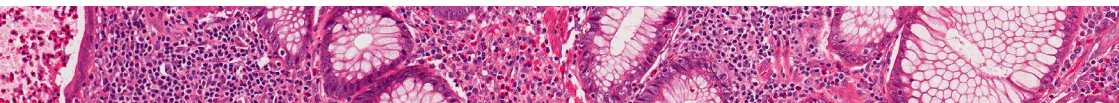
Tuesday 21st January 2020

Time	Day 2 - Tuesday 21 st January 2020	Speakers
8:30 - 9:00	Registration	
9:00 - 9:30	AI in Healthcare: Ethical Challenges and the Way Forward	Tom Sorrell (Warwick, UK)
9:30 - 11:10	CPath Fundamentals: WSI Data Wrangling & Standardisation	Andrew Janowczyk (CCIPD, USA) & Nasir Rajpoot (Warwick, UK)
11:10 - 11:30	Refreshments	
11:30 - 12:10	Introduction to Big Data Management	Hakan Ferhatosmanoglu (Warwick, UK)
12:10 - 12:50	Building an AI school for pathology - Part I	Scott Doyle (SUNY Buffalo, USA)
12:50 - 13:30	Lunch Break	
13:30 - 14:15	CPath Fundamentals: CNNs for Segmentation	Hao Chen (CUHK, Hong Kong)
14:15 - 15:00	CPath Advanced: Crowdsourcing Annotations	Lee Cooper (Northwestern, USA)
15:00 - 15:40	CPath Advanced: Challenges in Cancer Research, Clinical Workflows and Use of AI	Jakob Kather (Aachen, Germany)
15:40 - 16:00	Refreshments	
16:00 - 16:40	GPU optimisation for the use of CNNs in pathology images	Jonny Hancox (Nvidia Health & Life Sciences team, UK)
16:40 - 18:00	AI Fundamentals: Hands-on workshop on Data Wrangling	Andrew Janowczyk (CCIPD, USA) & Simon Graham (Warwick, UK)



Wednesday 22nd January 2020

Time	Day 3 - Wednesday 22 nd January 2020	Speakers
9:00 - 10:00	Future of AI in Pathology	Raj Gupta (Stony Brook, USA)
9:40 - 11:10	AI Basics: Bioinformatics and Connection to CPath	Fayyaz Minhas (Warwick, UK) & Lee Cooper (North-western, USA)
11:10 - 11:30	Refreshments	
11:30 - 12:10	CPath Advanced: Digital Profiling of TILs	Raj Gupta (Stony Brook, USA)
12:20 - 12:50	CPath Advanced: Accelerating the Development of AI Algorithms for Immunohistochemistry (IHC) Biomarker Scoring	Ahmed Serag (Philips)
12:50 - 13:30	Lunch Break	
13:30 - 14:00	CPath Advanced: Histo-Morphometry and Precision Medicine	Cheng Lu (CCIPD, USA)
14:00 - 14:30	CPath Advanced: Predicting Molecular Status and Clinical Use Case	Jakob Kather (Aachen, Germany)
14:30 - 15:10	CPath Advanced: Predicting Cancer Outcomes from Histology & Genomics	Lee Cooper (North-western, USA)
15:10 - 15:40	Panel Discussion	
15:40 - 15:55	Introduction to the Hackathons - Tasks, Datasets, Rules & Team Formation	Shan Raza & Mohsin Bilal (Warwick, UK)
15:55 - 16:10	Refreshments	
16:10 - 16:40	Building an AI school for pathology - Part II	Scott Doyle (SUNY Buffalo, USA)
16:40 - 17:00	Finalization of Teams+Gurus & Kick-off of the Hackathons	Young Park (Warwick, UK)
17:00 - 18:00	Hackathon Teams Setup - PathLAKE DGX2 (based at Warwick)	ALL Teams
19:00 - 21:00	Networking / Dinner	TBC



Thursday 23rd January 2020

Time	Day 4 - Thursday 23 rd January 2020
9:00 - 12:30	Hackathon (tea/coffee available throughout the morning)
12:30 - 13:30	Lunch Break
13:30 - 18:00	Hackathon (tea/coffee available throughout the afternoon)
19:00 - 21:00	Networking / Dinner

Friday 24th January 2020

Time	Day 5 - Friday 24 th January 2020
9:00 - 12:30	Hackathon (tea/coffee available throughout the morning)
12:30 - 13:30	Lunch Break
13:30 - 16:00	Hackathon (tea/coffee available throughout the afternoon)
16:00 - 17:20	Final Presentations
17:20 - 17:30	Announcement of Winners/Runners-ups & Prize Awards
17:30 - 17:45	Closing Remarks

