

# Imperial College London Artificial Intelligence Technology & Innovation 2019 Winter Programme

Data Science Institute, Imperial College London Programme Proposal

Dates: February 7 – February 19, 2019

#### I. INTRODUCTION

Imperial College London is pleased to propose the customized winter programme including artificial intelligence technology and innovation sessions and cultural excursions which provide a snapshot of life at Imperial College London for students from selected partner institutions for two weeks at Imperial College London in February 2019.

#### **GOALS**:

The primary goals of the proposed winter programme are to provide an international learning experience:

- > To inspire learning enthusiasm in artificial intelligence technology and data science through lectures and projects designed by Data Science Institute
- > To learn about academic research through visits to key facilities and laboratories in Imperial College London
- > To develop transferable skills such as communication, team-working, problem-solving, organisational awareness and improve English language skills
- ➤ To gain a competitive edge in applications for U.K. postgraduate programs, including knowledge about the postgraduate programs and the admission process for U.K. graduate schools
- To experience the rich cultural and recreational activities in London.

## II. IMPERIAL COLLEGE LONDON

Imperial College London is a world top ten university with an international reputation for excellence in teaching and research. Consistently rated amongst the world's best universities, Imperial is committed to developing the next generation of researchers, scientists and academics through collaboration across disciplines.

Located in the heart of London, Imperial is a multidisciplinary space for education, research, translation and commercialisation, harnessing science and innovation to tackle global challenges and the only UK university to focus entirely on science, engineering, medicine and business.

Generations of Imperial staff, alumni and students have changed the world with cutting-edge innovations; from the discovery of penicillin to the world's first invisibility cloak. Recognition of this ground-breaking work has come in the form of 14 Nobel Prizes, 81 Fellowships from the Academy of Medical Sciences, 77 from the Royal Academy of Engineering and 73 from the Royal Society.

Imperial brings together intersecting disciplines, industries and sectors across four major areas to further our understanding of the natural world, solve major engineering problems, lead the data science revolution and improve health and well-being. Emerging areas of research include the development of low-carbon technologies, stem cell therapy for stroke and how to turn light into matter.

# III. DATA SCIENCE INSTITUTE (DSI) AT IMPERIAL COLLEGE LONDON

The Data Science Institute (DSI) at Imperial College London opened in April 2014 and provides a hub for data-driven research and education across the College. Its mission is to provide a focal point for Imperial College's capabilities in multidisciplinary data-driven research by coordinating advanced data science research for College scientists and partners, alongside educating the next generation of data scientists.

With DSI acting as a focal point for data-driven research and application, we have partnered with several organisations in order to facilitate new research, like Imperial College-Huawei Data Science Innovation Lab and Imperial College-Zhejiang University Joint Applied Data Science Lab





President Xi visit DSI

Rector of ZJU visit DSI

For more information, please download the booklet about the Data Science Institute (2.4MB)

#### IV. AI TECHNOLOGY & INNOVATION PROGRAMME

This two-week winter programme will provide students with a range of events from the selected institutions on the following topical areas:

#### 1. Artificial Intelligence Technology and Innovation Lectures

Lectures will be taught by DSI emeritus faculty, DSI faculty, and/or advanced graduate students. Suggested topics include:

- Distributed computing and big data management
- Cryptocurrency and future bank
- Artificial Intelligence technology and innovation

• Correlative programming and technique.

Faculty speakers may include:

- Professor Yike Guo, Founding Director of Data Science Institute
- Professor Chris Pain, Data Assimilation Lab
- Professor Armand Leroi, Social & Cultural Analytics Lab
- Professor William Knottenbelt, Department of Computing.

# 2. One Imperial College Day

Experience an Imperial College day as a formal Imperial College student.

## 3. DSI & New Campus Visits

- Visit key facilities and laboratories of Data Science Institute at Imperial College London
- Visit Imperial West Campus.

### 4. Partner Universities Visits (Cambridge & Oxford)

# 5. Local Culture and Lifestyle

- Visit local famous attractions such as the British Museum
- Participate in local recreational activities.

## **Eligibility:**

- 1. Undergraduate and postgraduate students in Computer Science related majors or those who take intense interest in Big Data.
- 2. Proficiency in English, with good English skills in listening and speaking.

#### **Cost:**

The cost per student is £2980, including tuition fee, accommodation and transportation in London.

## **Schedule:**

DATE	Day1 2/7 THU	Day2 2/8 FRI	Day3 2/9 SAT	Day4 2/10 SUN	Day5 2/11 MON	Day6 2/12 TUE	Day7 2/13 WED
AM	Arrived in	Course Overview	Lecture	Lecture	Imperial Day		British Museum
Lunch	London	Lunch	Lunch	Lunch	Lunch	Visit Oxford	Lunch
PM	Welcome Dinner	Ice breaking sessions	Lecture	Workshop (DSI)	Imperial Day	OATOIU	Hyde Park picnic
Accommodation	London	London	London	London	London	London	London

DATE	Day8 2/14 THU	Day9 2/15 FRI	Day10 2/16 SAT	Day11 2/17 SUN	Day12 2/18 MON	Day13 2/19 TUE	Day14 2/20 WED
AM	Visit Cam- bridge	Visit Imperial West campus	Lecture	Presentation (DSI)	London sight-seeing	Leaving London	Arrived in China
Lunch		Lunch	Lunch	Lunch			
PM		V&A Museum	Workshop (DSI)	Farewell Dinner			
Accommodation	London	London	London	London	London		

<sup>\*</sup>Please note that the schedule is tentative and subject to change before the program begins.

# V. CONCLUSION

Imperial College London is pleased to present this programme for students from selected universities. For further information or discussion about the proposal, please contact:

Prof. Yike Guo
Founding Director of the Data Science Institute, Professor at the Department of
Computing
<a href="mailto:y.guo@imperial.ac.uk">y.guo@imperial.ac.uk</a>

Patch Huang (黄佩) Contact in China +86 18868106015 patch@elincyl.com