AI HACK 2021

20-21 FEBRUARY 2021

IMPERIAL COLLEGE DATA SCIENCE SOCIETY
Hackers' Information Guide v0.6

ICDSS

Welcome

We hope that you will have a great time during our two-day virtual hackathon and are looking forward to your creative solutions!

The largest student-organised data science hackathon in the UK. Our flagship AI Hack this year will be a virtual 24h frenzy of hacking and data science. It aims to bring the most forward-thinking and creative student data scientist to solve some of the world's most pressing challenges. Joining us for the hackathon will be a superb experience to:

- Test your data science skills and to apply them to real projects
- Chance to level up your CV for the career goals you aspire towards!
- A chance to win part of our £2000 worth of prizes
- The experience of obtaining professional mentorship during our event

Form teams, Solve REAL projects and win prizes.

The sexiest job of the 21st century :3

Sponsors (I)

Shopee | Gigabyte Sponsor

Leading online shopping platform in Southeast Asia, Taiwan and Brazil. Launched in 2015, it is a platform tailored for the region, providing customers with an easy, secure and fast online shopping experience through strong payment and fulfilment support.

Sponsors (II)

Jane Street

Jane Street is a quantitative trading firm and liquidity provider with a unique focus on technology and collaborative problem solving.

Kaiko

Founded in 2014, Kaiko is a market data provider in the blockchain-based digital assets space, providing institutional investors and market participants with enterprise-grade data infrastructure.

Microsoft

Microsoft enables digital transformation for the era of an intelligent cloud and an intelligent edge. Its mission is to empower every person and every organization on the planet to achieve more.

Statistics

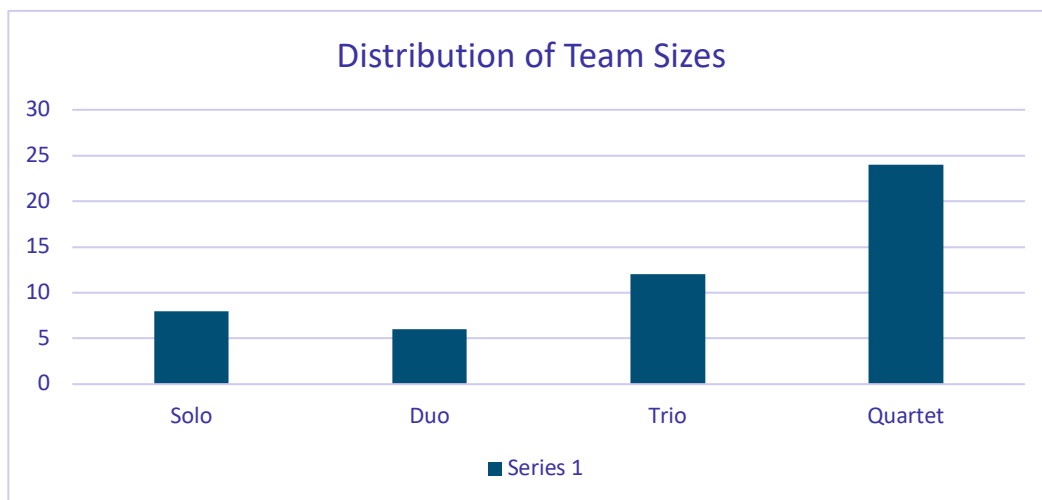Let's look at our demographics!

152 Participants in 50 Teams!

Hackers from 20 Universities and 6 countries!

We are from 7 disciplines: from computing to aeronautical engineering to medicine!

About 1/3 of us are Masters/ Year 4 students!

Who are you up against?

A fair bit of us are in groups of four!

Distribution of Team Sizes

Team Size	Count
Solo	8
Duo	6
Trio	12
Quartet	24

■ Series 1

Best Team Names ;)
- **Mech Eng Defectors**
- **We're Dense**
- **Student Ensemble**
- **Kind squared errors**

Schedule

These are important times that you should keep in mind for the AIHack. We're very excited for your project submission on Day 2! Please don't feel compelled to be too stressed and happy hacking!

Day 1 (20 Feb 2021)	
Timing in GMT	**Activity**
08:00 – 08:30	Join our opening event on Microsoft Teams! You will get information on the logistics of the hack and this is where we will release the challenges with the datasets.
08:30 onwards	Get your challenge and start cracking. This is the time to start hacking!
09:00 -12:00	Mentor check in session for you to obtain coaching and to clarify any queries you might have with a field professional.
At random!	Kahoot quizzes + vouchers Social games

Day 2 (21 Feb 2021)	
Timing in GMT	**Activity**
0900 – 1200	Your mentor will check in to your group for a second time.
13:00	Remember to submit your code on Devpost!
14:00	Remember to submit your video presentation! This is when we will perform the first round of judging Round 1 and we will handpick the top TEN performing teams for each challenge.

Finals (27 Feb 2021)	
Timing in GMT	**Activity**
09:30 - 11:30	Judging Round 2 (Finalist - Top 3 from each challenge) Presentation on Microsoft Teams with Question and answer session.

Challenges

Kaiko | Cryptocurrency dataset

Founded in 2014, Kaiko is a market data provider in the blockchain-based digital assets space, providing institutional investors and market participants with enterprise-grade data infrastructure. Tackling this dataset would give you hands on experience in dealing with problems in Financial Technology.

ICDSS Talent Development Team| Housing dataset

This dataset is relatively easier than the other two and are more suited to those who, for example, are participating in their first hackathon! However, don't be fooled as with careful inspection, it is possible to gain unique insights from the data.

Third Mystery Dataset| TBD

Prizes

Teams and individuals who have won prizes have the choice of receiving the prize or donating the prize to a charity.

Top-performer prizes ---

The THREE top performing teams for each challenge will be given a prize!
The top three will get a virtual 'Day at Microsoft' experience and also a feature on their blog :)

Kahoot quiz prize drops ---

Two Kahoot quizzes will be held during the hackathon
The top three performing participants for each quiz will be given a prize with ARV £50.

Microsoft Azure Subscription ---

Microsoft have generously sponsored $100 cloud credit per participant!

Social Media Challenge Prizes --

Those who had shared our hackathon posts will be judged according to their creativity, number of likes and comments to win a prize worth £20.

ARV stands for Approximate Retail Value, which is indicative. Actual retail prices may vary. Teams with spectacular performance may be allocated with a prize of higher value.

Judging Criteria [Out of 100]

Creativity [15]

Originality of angle of exploration (Interesting questions answered, use of valid alternative datasets)

Data Exploration [15]

Quality of techniques used to pre-processed data and to give valuable insights about the dataset(s)

Insight Visualisation [15]

Quality, relevance and effectiveness of visualisations used for exploration and/or analysis

Analytical Techniques [25]

Sophistication and correctness of methods of analysis. Cannot score high if cannot justify method.

Model Validation [5]

Use of metrics in showing performance of analysis.

Interpreting the Result [25]

Ability to interpret the result of the analysis and take a step back to explain the bigger picture. Ability to make a data-driven "business" decision.

FAQs

Where do I find the most updated information?

Please use the Discord channel for the most updated information and real-time communication. Reach out to a member of our organizing committee if you have any concerns.

Where do I talk to the Sponsors/ Seek help/ Mentors?

Please locate the appropriate Discord channel to communicate!

Where do I find the datasets?

The datasets will be posted on Google Drive/ Dropbox in due course.