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Welcome to this session:

Skills Bootcamp - Q&A Session

The session will start shortly...

Questions? Drop them in the chat.
We'll have dedicated moderators answering questions.

Skills Bootcamp Data Science Housekeeping

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly. **(Fundamental British Values: Mutual Respect and Tolerance)**
- No question is daft or silly - **ask them!**
- There are **Q&A sessions** midway and at the end of the session, should you wish to ask any follow-up questions. We will be answering questions as the session progresses as well.
- If you have any questions outside of this lecture, or that are not answered during this lecture, please do submit these for upcoming Academic Sessions. You can submit these questions here: **Questions**

Skills Bootcamp Data Science Housekeeping

- For all **non-academic questions**, please submit a query: ***www.hyperiondev.com/support***
- **Report a safeguarding incident: *www.hyperiondev.com/safeguardreporting***
- We would love your feedback on lectures: ***Feedback on Lectures.***
- Find all the lecture content in your **Lecture Backpack** on GitHub.
- If you are hearing impaired, kindly use your computer's function through Google Chrome to enable captions.

Safeguarding & Welfare

We are committed to all our students and staff feeling safe and happy; we want to make sure there is always someone you can turn to if you are worried about anything.

If you are feeling upset or unsafe, are worried about a friend, student or family member, or you feel like something isn't right, speak to our safeguarding team:

Ian Wyles
Designated Safeguarding Lead

Simone Botes

Nurhaan Snyman

Rafiq Manan

Ronald Munodawafa

Tevin Pitts

Scan to report a safeguarding concern

or email the Designated Safeguarding Lead:
Ian Wyles
safeguarding@hyperiondev.com

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Skills Bootcamp Progression Overview

✅ Criterion 1 - Initial Requirements

Specific achievements within the first two weeks of the program.

To meet this criterion, students need to, by no later than **01 December 2024 (C11)** or **22 December 2024 (C12):**

- **Guided Learning Hours** (GLH)**:** Attend a minimum of 7-8 GLH per week (lectures, workshops, or mentor calls) for a total minimum of **15 GLH**.
- **Task Completion:** Successfully complete the **first 4 of the assigned tasks**.

✅ Criterion 2 - Mid-Course Progress

Progress through the successful completion of tasks within the first half of the program.

To meet this criterion, students should, by no later than **12 January 2025 (C11)** or **02 February 2025 (C12):**

- **Guided Learning Hours** (GLH)**:** Complete at least **60 GLH**.
- **Task Completion :** Successfully complete the **first 13 of the assigned tasks**.

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Skills Bootcamp Progression Overview

✅ Criterion 3 – End-Course Progress

Showcasing students' progress nearing the completion of the course.

To meet this criterion, students should:

- **Guided Learning Hours** (GLH)**:** Complete the **total minimum required GLH,** by the **support end date.**
- **Task Completion : Complete all mandatory tasks**, including any necessary resubmissions, by the end of the bootcamp, **09 March 2025 (C11)** or **30 March 2025 (C12).**

✅ Criterion 4 - Employability

Demonstrating progress to find employment.

To meet this criterion, students should:

- **Record an Interview Invite:** Students are required to record proof of invitation to an interview by **30 March 2025 (C11)** or **04 May 2025 (C12)**.
  - **South Holland Students** are required to proof and interview by **17 March 2025.**
- **Record a Final Job Outcome :** Within 12 weeks post-graduation, students are required to record a job outcome.

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Learning Outcomes

- **Define and explain the role of data science in social good initiatives,** including areas such as public health, education, poverty reduction, and humanitarian aid.
- **Explain theoretical frameworks** for **designing data-driven solutions** that prioritize equity, sustainability, and ethical responsibility.
- **Analyse case studies** where **data science has driven positive social impact**, understanding methodologies, data sources, and ethical considerations.
- **Identify and evaluate ethical concerns** in social good applications, including issues of bias, privacy, and unintended consequences.
- **Assess potential challenges and propose solutions** to ensure responsible and impactful use of data science for social good.

Is there a specific topic from this week that you'd like to review or gain more clarity on?

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Which of the following best describes “Data Science for Social Good”?

A. Using data science exclusively for profit-driven companies

B. Applying data science to solve real-world societal challenges

C. Using data for personal decision-making

D. None of the above

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Which of these is NOT a key societal challenge that data science can address?

A. Public health improvements

B. Educational resource optimization

C. Enhancing personal entertainment recommendations

D. Disaster response

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C. Inability to monetize social good projects
D. Reducing human involvement in decision-making

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Which statement is true about using open datasets for social good projects?

A. They always provide completely unbiased data
B. They enable collaboration and transparency
C. They are only accessible to government institutions
D. They are usually too small to be useful

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What is an advantage of using platforms like Kaggle for social good projects?

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B. A social media company recommending content to users
C. Using AI to optimize stock trading strategies
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B. Recommender systems for food preferences
C. Generative AI for creating new videos
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C. Fairness-aware metrics like disparate impact and equalized odds

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B. Lack of clean, labelled, and representative data

C. There are too many pre-trained models available

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Let’s Breathe!

Let’s take a small break before moving on to the next topic.

Which of the following best defines a collaborative tool for social good projects?

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B. A business intelligence tool used only for internal decision-making

C. A platform that allows researchers to share models and data openly

D. A single-user Excel sheet

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B. By automatically rebuilding damaged infrastructure

C. By replacing emergency response teams with AI-driven systems

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Which best describes a hands-on approach to Data Science for Social Good?

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B. Creating AI tools that focus solely on automation

C. Actively building and testing predictive models to solve real societal issues

D. Using only proprietary datasets for maximum accuracy

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What role does AI ethics play in Data Science for Social Good?

A. Ensuring AI models respect privacy, fairness, and transparency
B. Increasing the profitability of machine learning applications
C. Ensuring AI models are trained only on social media data
D. Allowing AI to operate without human intervention

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What is a common challenge when working with open data for social good?

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B. There is often a lack of clean, structured, and well-labelled data

C. Government agencies always provide real-time datasets

D. The datasets are always perfectly suited for deep learning models

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Why is engaging with NGOs and the public sector valuable for social good projects?

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What is the main purpose of a final project in Data Science for Social Good?

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Any more questions on Simulations and Stochastic Processes?

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Q & A SECTION

Please use this time to ask any questions relating to the topic, should you have any.

Thank you for attending

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SKILLS FOR LIFE
SKILLS BOOTCAMPS

Department for Education