

# 2021/22 candidate record form, production log and assessment record

## Level 3 Extended Project (7993)

Please attach the form to your candidate's work and keep it at the centre or send it to the moderator as required. The declarations should be completed as indicated.

**Centre number**

[Click here to enter.](#)

**Centre name**

[Click here to enter text.](#)

**Candidate number**

[Click here to enter.](#)

**Candidate's full name**

[Click here to enter text.](#)

Work submitted for assessment **must** be the candidate's own. If candidates copy work, allow candidates to copy from them, or cheat in any other way, they may be disqualified.

### Candidate declaration

Have you received help/information from anyone **other than** subject teacher(s) to produce this work?

☐

No

☐

Yes (*give details below or on a separate sheet if necessary*).

[Click here to enter text.](#)

Please list below any books, leaflets or other materials (for example DVDs, software packages, internet information) used to complete this work **not** acknowledged in the work itself. Presenting materials copied from other sources **without acknowledgement** is regarded as deliberate deception.

[Click here to enter text.](#)

We may use examples of candidate's work for standardisation or training purposes. Please see our privacy notice for more information on how we use assessment data and on your rights under data privacy legislation.

I have read and understood the above. I confirm I produced the attached work without assistance other than that which is acceptable under the scheme of assessment.

Candidate signature.

Date

[Click here to enter a date.](#)

### Supervisor declaration

I confirm the candidate's work was conducted under the conditions laid out by the specification. I have authenticated the candidate's work and am satisfied, (to the best of my knowledge) that the work produced is solely that of the candidate.

Supervisor signature.

Date

[Click here to enter a date.](#)

Candidate number

[Click here to enter.](#)

Candidate's full name

Muhammad Kashif-Khan

## Submission checklist

### To be completed by the supervisor

Extended Project **working** title

[Click here to enter text.](#)

Extended Project **final** title

[Click here to enter text.](#)

Form of project

☐

Either written report

☐

Or

[Click here to enter text.](#)

and accompanying written report

Is this project part of a group project?

☐

No

☐

Yes If 'Yes', give brief details [Click here to enter text.](#)

**Please note** that failure to complete or submit a compulsory element may result in a mark of zero being awarded.

Select/tick	Items that <b>must</b> be included	Notes
<input type="checkbox"/>	1. A signed and completed <i>Candidate record form, production log and assessment record</i>	This document. All pages must be completed.
<input type="checkbox"/>	2. Research based written report	If the project product is an artefact or a production, an accompanying research based written report is also required.
<input type="checkbox"/>	3. Evidence of the project product	Eg photographs of artefact, investigation or production; a piece of creative writing (artefact); research based written report.
<input type="checkbox"/>	4. Evidence of a presentation within the production log	Presentation on the project process. Where the project product is itself a presentation (for a specified audience), a presentation on the project process must also be delivered to a non-specialist audience

**Candidate number**

[Click here to enter.](#)

**Candidate's full name**

Muhammad Kashif-Khan

## The taught skills element

**To be completed by the supervisor**

### **Outline details of taught skills**

Record here details of relevant skills taught in a class/group and details of relevant skills taught individually to this candidate as described in the specification. Continue on a separate sheet if necessary.

[Click here to enter text.](#)

**Candidate number**

[Click here to enter.](#)

**Candidate's full name**

Muhammad Kashif-Khan

## Record of marks

### To be completed by the supervisor

Marks must be awarded in accordance with the instructions and criteria in the specification.

Summary information to show how the marks have been awarded should be given in the spaces below in addition to comments in other pages of this document and any supporting information in the form of annotations on the candidate's work.

Skill area	Maximum mark	Mark awarded	Supervisor's supporting statement
A01 Manage	10	<a href="#">Click.</a>	<a href="#">Click here to enter text.</a>
A02 Use resources	10	<a href="#">Click.</a>	<a href="#">Click here to enter text.</a>
A03 Develop and realise	20	<a href="#">Click.</a>	<a href="#">Click here to enter text.</a>
A04 Review	10	<a href="#">Click.</a>	<a href="#">Click here to enter text.</a>
Total mark	50	<a href="#">Click.</a>	

### Supervisor's concluding comments

[Click here to enter text.](#)

### Internal moderation comments if appropriate

[Click here to enter text.](#)

### Supervisor declaration

I confirm that no work assessed for the award of the marks above is also to be submitted, or has been submitted, for any other accredited qualification(s).

Supervisor signature.

Date

[Click here to enter a date.](#)

## Record of initial ideas

### To be completed by the candidate

This page records initial meeting(s) with your supervisor to agree your project ideas. Additional pages can be submitted if more than one idea has been explored.

My idea(s) for topic/title

Can AI emulate human consciousness?

My ideas for research and development of my project

Potential talking points could be:

- Idea behind the human mind (quantum physics)
- Intricacies (processing power, 5 senses like smell and touch, practicalities)
- Implications (jobs, everyday interactions)
- Details of what is an AI
- Defining consciousness (set out guidelines rather than a true definition, as the definition itself is hard to explain)
- Turing tests to differentiate between a computer and a human
- Expanding the mind-set of humanity (is there something that the AI can perform that was never conceived by a human, can the AI surpass a human's intelligence. Should the AI suffer from negative emotions like pain, how might emotions be conveyed)

Some research points I've found:

- **Kurzgesagt - Robot rights**, if we give emotions and sentience to an AI, should they deserve rights like a human has
- **Kurzgesagt - The origin of consciousness**. Explains awareness, hard to explain and pinpoint ideas for a direct definition. Consciousness and intelligence are related. Living things can be unconscious, drifting into food to survive. Idea of a 'self' requiring to remember, see, smell, senses of the future, ability to sympathise and empathise through predictive mind reading
- **Vsauce - What is consciousness?** Hard to explain. Humans feel it and experience unconsciousness
- **Google - Consciousness in AI**.
- **3b1b - But what is a neural network?** Explains learning logically using neural networks and machine learning.
- **Sabine Hossenfelder - 10 differences between AI and human intelligence**. Helps to identify potential constraints in AI compared to human intelligence.
- **2 min papers – Tesla's self-driving cars learn in a simulation**. Essentially a case study, identifying how cars can learn from 'training data'. Identifies all points made from Kurzgesagts origin of ai, which could be in proof for the statement
- **AI magazine (Vol. 38 No. 4: Winter 2017)**  
(Ideas in bold indicate the creator and title of their research/review/magazine)

Potential ideas I could do:

- Interview a researcher at the University of Leeds to see what they believe on the matter
- Launch a survey to see what other people believe on the matter.

**Candidate number**

[Click here to enter.](#)

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My summary of the comments and advice from my supervisor

- Advised to look at research points for the topic as the title recently changed
- Time management
- Meeting deadlines
- Keeping up to date with my EPQ log/weekly entry
- Using subsections and headings
- Harvard style referencing

Modifications I have made as a result of my discussion with my supervisor

Supervisor advised titles of interest for my related ideas. Also advised to research topics and ideas using google scholar in time for next week (completed). My notes of the plan have been updated and I would now need to consider how I can structure my project to fit the question.

Date 20 September 2021

Candidate number

[Click here to enter.](#)

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## Part A: Candidate proposal

### To be completed by the candidate

Working title of my Extended Project.  
Present the topic to be researched in the form of a short statement/question/hypothesis with clear focus.  
Can AI emulate human consciousness?

- my initial resources will be  
YouTube  
Magazines  
Articles  
Research papers

- the courses of study or area(s) of personal interest to which the topic relates  
Computer science and AI  
Psychology  
Maths and science (STEM)

- my intended product  
Essay and Presentation

Provide details of the courses that you are currently studying

Qualification type	Awarding body & subject	Qualification type	Awarding body & subject
eg A-level, Modern Apprenticeship, BTEC	eg AQA Mathematics, OCR Computing, WJEC English	<a href="#">Click to enter text.</a>	<a href="#">Click here to enter text.</a>
A-level	Edexcel Maths	<a href="#">Click to enter text.</a>	<a href="#">Click here to enter text.</a>
A-level	AQA Physics	<a href="#">Click to enter text.</a>	<a href="#">Click here to enter text.</a>
A-level	AQA Chemistry	<a href="#">Click to enter text.</a>	<a href="#">Click here to enter text.</a>

**Notice to candidate** You must not take part in any unfair practice in the preparation of project work required for assessment and you must understand that to present material copied directly from any book or any other sources without acknowledgement will be regarded as deliberate deception. If you use or attempt to use any unfair practice you will be reported to AQA and you may be disqualified from **all** subjects.

### Candidate declaration

I certify that I have read and understood AQA's Regulations relating to unfair practice as set out in the notice to candidates above.

Candidate signature.

Date 13 September 2021

**Candidate number**

[Click here to enter.](#)

**Candidate's full name**

Muhammad Kashif-Khan

## Part B: Supervisor's comments on candidate proposal

### To be completed by the supervisor

Please comment below on the validity and feasibility of the candidate proposal (Part A) as an Extended Project

	Supervisor's comments
Indicate the relation to, and development/extension outside of, the main course(s) of study or interest	<a href="#">Click here to enter text.</a>
Comment on the suitability of the proposed initial sources and research base	<a href="#">Click here to enter text.</a>
Confirm that the project is feasible in the proposed timescale and/or indicate any potential difficulties that may prevent the candidate from meeting the assessment objectives	<a href="#">Click here to enter text.</a>

Indicate the expected format of the project product that will be submitted for assessment

- ☐ Research based written report
- ☐ Artefact (for example prototype, model, artwork, scientific investigation, creative writing) plus written report

Is the project a contribution to a group exercise? ☐ YES ☐ NO

If Yes, confirm that there is a defined individual contribution by the candidate ☐ YES ☐ NO

List the **other** group members below.

Candidate No. [Click.](#)

Candidate Name [Click here to enter text.](#)

Candidate No. [Click.](#)

Candidate Name [Click here to enter text.](#)

Candidate No. [Click.](#)

Candidate Name [Click here to enter text.](#)

Supervisor signature.

Date

[Click here to enter a date.](#)



**Candidate number**

[Click here to enter.](#)

**Candidate's full name**

Muhammad Kashif-Khan

## Part C: Centre coordinator's approval of candidate proposal

**Supervisor's name**

[Click here to enter text.](#)

### To be completed by the centre coordinator

If you are acting as both the Centre coordinator and the supervisor, please seek counter signature from a senior colleague

Centre coordinator's comments on the feasibility and acceptability of the proposal (parts A & B) as an Extended Project

[Click here to enter text.](#)

☐ Approved

☐ Approved subject to the implementation of the centre coordinator's recommendations

☐ Resubmission required

**Centre coordinator's name**

[Click here to enter text.](#)

Centre coordinator signature.

Date

[Click here to enter a date.](#)

## Planning review

### To be completed by the candidate

This page records your outline plan once your proposal has been approved.

My next steps in planning, researching and deadlines that I will set myself. What I intend to do, by when, what resources I will use and how I will implement the recommendations of the centre co-ordinator (where appropriate).

Plan for structuring and subtitles:

- Insight to what is an AI and how they are created using neural networks and deep learning
- Establishing what is consciousness, setting clear guidelines on what can officially constitute consciousness for a human/living being.
- How we might begin to develop a 'conscious AI'
  - What is the Turing test, and what does it mean for computer scientists so that they can develop an AI capable of thinking?
  - Can we train an AI on its conscience, teaching it rights and wrongs that we've learnt?
  - How can we train an AI based on its sensory and awareness attributes using neural networks and deep learning, provided a close-to-life physics simulation?
- Potential setbacks in terms of creating an AI with the processing speed, functionality, and actions as humans
  - In order to protect the bot, should we inhibit certain cognitive processes such as depression and anxiety
  - The obvious need to write failsafe protocols to ensure the robot doesn't go 'rogue' (e.g., self-termination, harm to others). Should there be anything else that requires a failsafe too?
  - Potential need to use quantum computing to simulate the mind of a person.
- Potential implications on what creating an AI with such power can do
  - Productivity increase, but at what cost to job security
  - Energy costs
  - Commercial viability in the market
  - Argument of robot rights
- Preposition of personal ideas throughout the report

My summary of the comments and advice from my supervisor

Supervisor reviewed the plan mentioned above and advised the following:

- Proceeding structure was clear and concise. Was formally impressed with the layout. Quantity of ideas was found to be enough, with each exploring different yet related ideas
- Keep hold of all references, citing them appropriately as mentioned in the Harvard style referencing lesson
- Encouraged to proceed with the idea of interviewing staff and PhD students at the University of Leeds (currently in contact)
- Switch the titles of the 'Insight to what is an AI' and 'Establishing what is consciousness' around to identify a much broader topic first making it easier to branch into the former
- Identify, explain and evaluate a brief, 50-year history of AI and the advancements occurring over the years
- Advised to submit the 'Mid-project review' on the 18<sup>th</sup> of November and the first draft on the 9<sup>th</sup> of December.

**Candidate number**

**Candidate's full name**

[Click here to enter.](#)

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Modifications I have made as a result of my discussion with my supervisor and/or the comments from my centre coordinator

New plan is as follows:

- Establishing what is consciousness, setting clear guidelines on what can officially constitute consciousness for a human/living being.
- Insight to what is an AI and how they are created using neural networks and deep learning
  - How and why was AI first conceived? - Identify, explain, and evaluate a brief, 50-year history of AI and the advancements occurring over the years
- How we might begin to develop a 'conscious AI'
  - What is the Turing test, and what does it mean for computer scientists so that they can develop an AI capable of thinking?
  - Can we train an AI on its conscience, teaching it rights and wrongs that we've learnt?
  - How can we train an AI based on its sensory and awareness attributes using neural networks and deep learning, provided a close-to-life physics simulation?
- Potential setbacks in terms of creating an AI with the processing speed, functionality, and actions as humans
  - In order to protect the bot, should we inhibit certain cognitive processes such as depression and anxiety
  - The obvious need to write failsafe protocols to ensure the robot doesn't go 'rogue' (e.g., self-termination, harm to others). Should there be anything else that requires a failsafe too?
  - Potential need to use quantum computing to simulate the mind of a person.
- Potential implications on what creating an AI with such power can do
  - Productivity increase, but at what cost to job security
  - Energy costs
  - Commercial viability in the market
  - Argument of robot rights
- Proposition of personal ideas throughout the report

Date

[Click here to enter a date.](#)

## Mid-project review

### To be completed by the candidate

This page records your outline plan when you have completed your research.

Is my project following my original plan? How has my plan developed?

As an enthusiastic problem solver who loves solving challenges from a young age, I found my innate ability in fixing software-related problems with minimal knowledge before exposure. Through using logic, creativity, and determination to find solutions to some of the most complex problems I have encountered, I found my abilities matched the skills needed to take computing into further study while growing up in this age of rapidly expanding 'technological revolution'. The opportunity to study GCSE Computer Science greatly increased my interests, learning what built the basis of technology and developing my coding ability.

Through the opportunity of time given to me due to the pandemic, I delved deeper into the different projects happening globally, from the integration of technology into our everyday lives, to the development of machines to combat climate change and venturing to distant planets. I found, behind many of these projects, collaboration between humans and AI was vital to accomplish all these goals. While looking into AI more and more, the concept of creating a 'conscious AI' loomed in my head, feeding my curiosity on whether AI can surpass humans where needs be, through exploring and expediting creativity and problem-solving skills in a fraction of time with minimal resources required.

Unfortunately, my project is currently falling behind expected schedule. As it was intended that I would do some work every week, external factors such as injuring my neck, student leaders and preparation for exams took a significant portion of my time out of the planned work, leading to significant time loss. Problems such as my neck took about 2 weeks to recover from, which was prolonged because of the medicine given to me. As a result, my focus was lost in all lessons, leading to further time loss trying to re-learn all the content taught in all lessons.

As for the content aspect, the plan has been added to include the ideas of intelligence from the primitive mind, outlining the necessary components to try and decompose further how might we create an intelligent, conscious AI. Nothing further was concluded due to the limitations stated above, however I might consider changing my title, considering my newfound knowledge of consciousness.

My summary of the comments and advice from my supervisor

My supervisor is aware of my circumstances and is encouraging me to try to complete the essay for the 9<sup>th</sup> of December. She has also allowed us to send initial drafts to her, enabling her to review the project within due time. There was also an opportunity arranged by her to take our current work and have our peers review it, in which they suggested improvements to the structure. The content within my essay seemed decent to my peers, suggesting the essay is up to a good standard at the very least.

After reviewing my essay, the teacher has mentioned the following:

- 'Clear and eloquent opening Muhammad. It's good to see that you have a very clear plan too'
- I was required to focus on the paper more analytically, reducing the amount of information I had on the essay

Modifications I have made as a result of my discussion with my supervisor at this stage

- Increased time dedication for the project.
- Supervisor advised to 'rigorously evaluate theories in this subject'
- Also advised to 'keep a bibliography' of all sources on an external document, with an evaluation of all the sources.

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[Click here to enter.](#)

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My final title and agreed form of project product

Unsure for the title as of now. Structure remains relatively the same, with the inclusion of the ideas behind intelligence

My planned next steps to complete my project

As for the future, I intend to spend as much time as possible researching and as a key point, typing up my report/essay. To do this, my ability to focus on the task at hand must increase, distractions must be kept to a minimum, and I must find any amount of time whenever possible to research and type up my essay, as I am aware I won't have much time to do so during the weeks in December, knowing my exams is a priority.

Date

[Click here to enter a date.](#)

## Project product review

### To be completed by the candidate

This page records the (near) completion of your project product. Outline the successes, failures, additions and/or changes you made as you followed the plan in your mid-project review

Did my project follow my revised plan (from the mid-project review)?

In general, the project followed my initial plan with some added detail taken from sources that I found after the layout of the plan, until concerns were raised about the lack of the debate section, a feature I didn't realise needed adding until reviewed as I thought the essay was meant to highlight and propose new theories as to how a conscious AI can be created, and not whether it can be created (essentially I thought the purpose was to inform, not debate). My work has followed the plan mentioned in the mid-project review to an extent, completing approximately 2500 words within 2 weeks. I currently sit on 3500 words, with the final couple of sections remaining.

The remaining essay now consists of the major debate of whether we can emulate consciousness using AI, through relating everything discussed prior (what is consciousness, what is AI, etc...) to answer the question, and a conclusion as to whether the AI should even be produced. The research has been conducted, containing points for and against the statement (with the help and guidance of my teacher), and as of now just requires time to complete (currently invested into mock exam preparation, due to the uncertainty of the exams going ahead). The expected date to resume my EPQ is around the 26<sup>th</sup> of January 2022, the approximate end date of my exams, where the essay and presentation can be completed and presented by the 17<sup>th</sup> of February 2022.

All information taken that is related to the project has been critically analysed for the use, relevance, detail, date produced, and overall validity of information presented. Each source has been picked to ensure the most reflective opinions of the topic, while being supported by excellent theories and ideas so that the question is clearly answered.

My summary of the comments and advice from my supervisor at this final stage

After a thorough review of my report, my teacher has mentioned the following:

- Clear expression of ideas throughout the report, with some comments on various sections relating to the various ideas I can present in the debate.
- The report currently read as a 'detailed descriptive plan'. To proceed further with the essay, I must now 'vigorously debate my chosen topic'.
- I must 'link back to the question' with every point made
- Advised to look up different ideas on present examples of AI, such as the soft robots created in Japan, to assist with the essay.

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Modifications I have made as a result of discussion with my supervisor at this final stage

Do I need to do anything else to complete my product?

The comments provided has helped me to understand what I now must do. The remaining plan details below:

- Describe the idea of the title. What does it mean to emulate (maybe re-write title)?
- Ideas supplied to turn this into a contentious debate by teacher. Sent 2 essays on whether AI can currently think, advised looking into soft robotics
- General tidy up of spelling and grammatical errors in the essay
- Addition of ideas presented in each section of the essay, and relation to the question.
- Produce and rehearse the presentation

The debate, 'Can we emulate consciousness using AI?' (more ideas can be debated if needed):

For:

Supporting the claim using all the information stated prior to debate (learning through machine learning, self-awareness by the analysis of one's surroundings (sensing hardware), knowledge by using storage units to recall information relevant to the task, stored in files with a similar header)

Against:

AI currently possesses some human characteristics, but not all the necessary ones to suggest it can act like a human with human behaviour

Exploration of soft robotics

Developmental setbacks, a potential hard limit which cannot be exceeded?

The element of Discouragement - Contesting theory of robot rights – perhaps a discouraging thought until debated

Arguments for both for and against:

The analysis of the (potential) quantum effect on the mind and/or brain, and how that might be reversed engineered to create a kind of 'quantum matrix' which works interchangeably to replicate the chain of neurons in the brain.

Logically proving whether an AI is self-aware, but not responsive since it needs to learn how to be responsive (halfway to complete consciousness)

The idea that we are unable to obtain a definitive yes or no answer for artificial consciousness, as we only have a 3<sup>rd</sup> person perspective (or maybe not, if we can read the mind of the AI)

Update (close to submission deadline):

The proposed plan has shifted to favour 2 main debating points, the psychology and physiology of and AI vs a human. This decision was taken to ensure the best structure for clarity and conciseness, while still being able to vigorously debate whether a conscious AI is feasible by comparing and assessing these qualities individually. In addition, the title has been updated to 'Can we simulate consciousness using Artificial Intelligence', a move I believe was necessary to clarify the intention of the debate and its direction, as I found the term 'emulate' to represent an idea that wasn't desirable in the essay. The focus of the question has also shifted to debating whether a conscious AI has been developed in today's world, while offering and commenting on future ideas and developments of a conscious AI. The content of my essay has been overhauled massively to favour critical analysis for the new aforementioned question, eliminating the massive amount of information I had included in the beginning of my essay.

There was also the concern of the word count after ending up with 9000 words approximately as my finished product. My supervisor has recommended condensing the essay due to the risk of being penalised for exceeding the word limit, and my essay now sits at 6500 words approximately, keeping everything detailed yet structured for a more polished product (a task I found to be a major challenge since I thought I required all the information to end conclusively). As a final point, my conclusion wasn't up to standards with the essay's content. This was fixed by my supervisor advising me how I should conclude, referring to every debated point to provide the most informed and analytical opinion.

Date

[Click here to enter a date.](#)

## Presentation record part A

### To be completed by the candidate

This page records your presentation and its preparation.

Planned format of my presentation (eg timing, audience, use of visual aids, slides, use of notes, etc.)

In an ideal format:

- 15-minute presentation consisting of:
  - 10 minutes of presenting a general overview of the project, including an analysis of the planning, construction and evaluation of the report and project log (to some degree)
  - 5 minutes consisting of a Q and A section where I will be asked questions based on the report. Must be an in-depth analysis of a response
- Clear, concise information being communicated to the audience
- Excellent structuring of the presentation
- Pace and fluency while communicating ideas to the audience

Planned content of my presentation

To present ideas in a structured, chronological format, I propose the following plan:

- The title of the question (Can we simulate consciousness using artificial intelligence)
- Aims of my project – included the aims of my essay and personal aims I wish to improve on during the EPQ
- An analysis of what consciousness is – defining consciousness and giving examples of general skills and qualities (physical and psychological)
- An analysis of AI – again providing definitions, looking at weak vs strong AI, a preposition of how to determine whether an AI is conscious or not and the analysis of the fields that stem from AI, especially for a neural network
- Analysing the question for debating – giving reasons as to why the idea of simulating was chosen specifically, and comparing strictly with human consciousness and AI today
- Analysis of the physical qualities of man vs machine – looking at the similarities of an ability to store knowledge, remember, and be physically aware, while contrasting with linking memories together, size of storage, transfer speeds and processing power
- Analysis of the psychological qualities of man vs machine – looking at the similarities of the ability to learn (backpropagation) which may exhibit a form of self-awareness, and the ability to recognize and express visual emotions, while contrasting with the lack of thoughts and emotions via social robotics, morals and ethics and the potential of never knowing if the robot is conscious
- A conclusion
- Analysis for any potential for a conscious AI to be created in the future – involves the theory of the quantum mind, chaos theory and potential architecture being considered for the future.
- Evaluation of the entire process, strengths and weaknesses
- A slide to prompt for questions

Total consists for 10 slides, excluding first and last slides, making me constrained for a slide per minute. Ideally, I would keep some notes on my phone as a form of backup in case I fall behind in content due to time, or complete freezing due to nervousness or abrupt loss of focus, but I intend to still make eye contact with the audience and use hand gestures to make my presentation somewhat more appealing.



**Candidate number**

[Click here to enter.](#)

**Candidate's full name**

Muhammad Kashif-Khan

Modifications I have made as a result of rehearsal and/or discussion with my supervisor

Supervisor has advised the following:

- Reflect on every aspect of the project, considering questions like
  - Can you identify your strengths and weaknesses, and how you overcame them?
  - Have you developed any new skills?
  - What would you change if you were to do an EPQ again?

Date

[Click here to enter a date.](#)

Candidate number

[Click here to enter.](#)

Candidate's full name

Muhammad Kashif-Khan

## Presentation record part B

### To be completed by the supervisor

Record and comment below on the delivery of the presentation

	Supervisor's record/comments
The nature of the audience (include numbers of staff, students and others present)	<a href="#">Click here to enter text.</a>
The nature of the presentation (include use of notes, use of display items, and use of presentation software)	<a href="#">Click here to enter text.</a>
Comment on the content and delivery of the presentation (for example clarity of ideas, structure of presentation, pace, engagement with audience)	<a href="#">Click here to enter text.</a>
Comment on the response of the candidate to questions that demonstrated understanding and grasp of the project and/or its production. <b>Give examples of questions asked and answers given.</b>	<a href="#">Click here to enter text.</a>

Supervisor signature.

Date

[Click here to enter a date.](#)

## Summary and reflection

### To be completed by the candidate

This page records your summary, reflection and evaluation when you have completed your project product and given your presentation.

Some questions you may wish to answer in this section include, what have I learned from completing this project? What new knowledge or expertise have I enjoyed or found valuable? What are the strengths and weaknesses of my project (including planning and organisation)? What skills have I improved? What changes would I make if I undertook such work again? What advice would I give to others undertaking such a project? Overall, I believe I have learned a lot during my Project. The content I have managed to research has enhanced my already growing thirst for more knowledge as to how can we expedite the creation of a strong AI in today's world. Since my desire for my future career to be in the field of computer science, the idea for doing an EPQ has always appealed to be beneficial to me, strengthening my foothold in the subject and allowing me to prepare for university coursework in both general essays and specific course content. From my research, I discovered the ideas of backpropagation and gradient descent, which I believe I will cover to a similar extent in the first or second year of computer science. From the skills like presenting to researching to project management, referencing and organisation, this EPQ has helped me to improve on all of these, and many more, such as the ability to plan, debate, explain and manage the rest of my available time to its greatest potential. All the aims I set out to complete before the deadline are, I believe, complete to my best standards, however, there is always room for improvement.

My report has been completed to the best of my ability, including in-depth knowledge, research, and critical analysis of the topic areas to provide a clear and contentious debate. My researching skills developed fundamentally throughout the project, focusing on how such sources are reliable for information by researching the creator and compiler of the research, conducting background checks as respect to their career paths and qualifications, and focusing on the content within the source to cross examine with my own extensive and accurate knowledge and other accredited sources, as mentioned within the source appraisal on the bibliography section of the EPQ. My EPQ was primarily focused on answering the question 'Can we simulate consciousness using AI?' (the question investigated into in the beginning of the debate), and remained focused, using only the most necessary knowledge and opinions to reach a distinct, justified conclusion, all of which I find to be fundamental strengths within my essay.

As for the general weaknesses during the essay, there were a few. One main concern was the ability to manage my time, due to injuries that left me taking a drug that caused dizziness and nausea to relieve pain, the several distractions I had during my project log and essay write up, and external factors such as exams which no doubt increased pressure on me due to the uncertainty of the exams going ahead. To counter this, I found my best strategy was to prioritise what needed to be completed first, completing the necessary word count before the deadline, while communicating to the supervisor as to why I couldn't finish my project due to what is stated above. Another weakness I've had to work on was lack of, and therefore problem of, debating my question vigorously. This arose since I somehow lost sight on what an EPQ is all about, thinking the primary purpose was to inform and not debate the reader of a topic. My supervisor kindly advised me on this point, meaning I had to change the direction for my project to suit the needs for the specification. This was achieved by proposing an alteration to the plan, while deviating my research into the potential of creating an AI within today's era and proposing the future of such a 'strong AI's' development. I believe this has been completed to a suitable extent. Other problems involved condensing word counts to satisfy the limits stated by the EPQ requirements, which I found to be a challenge due to my opinion on everything being important, the lack of a suitable conclusion for my essay which was fixed by cross referencing all the content mentioned within my essay to provide conclusive and the most informed opinions and finally the massive amount of restructuring I needed to do to eliminate the massive amounts of information I had at the beginning of the essay, all fixed due to the guidance of my supervisor and her take on what should be improved. Overall, this essay was a massive undertaking of a task, and I believe I have emerged with the greatest possible refined product I have ever achieved.

In terms of the presentation, that proved to become a major strength to convey information to a similar age group audience. From a self-review perspective, I believe the presentation was well structured, focusing on a similar plan laid out within the presentation planning section of the production log, and provided enough detail to inform

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Muhammad Kashif-Khan

the audience of my findings and overall, my personal strengths and weaknesses of the project. Communication I believe was up to par with what I would have liked, keeping the audience engaged with easy-to-understand pictures, engaging dialogue and prompts (such as the ideas of mass extinction of all species on Earth due to the AI's prompt of resolving climate change, and the comparison of, consciousness to a pyramid, where skills built up self-awareness) and my hand gestures and loud, booming voice which I used to immediately gain the attention of the entire audience (profoundly saying 'ladies and gentlemen' before beginning). My presentation wasn't completed due to technical difficulties and unfortunate timing, where the classroom was meant to be in use, forcing me to pause the presentation mid-way to change classrooms, and the timing for the audience who needed to leave due to other important commitments. The reception after the abrupt ending was encouraging, where the supervisor suggested my presentation was excellent and engaging. To improve, more rehearsals could have been conducted to provide even more fluidity to what was already quite a fluid and confident performance, and perhaps condensing more information down into vital chunks the audience needed to understand, rather than feeding lots of information, increasing the time taken to present.

If I was to change anything about the EPQ report, I would attempt to conduct primary research, since the basis of my entire report was based on secondary research. I would also attempt to manage my time better to suit better times so that I can have more time to analyse the structure and main talking points more within my presentation. These points, especially the idea of time management, I would advise to anyone else doing their EPQ, since underestimating how much time is remaining leads to severe oversights and problems completing the report, potentially leading to loss of marks.

On a personal note, I find myself leaving this project a little frustrated due to the piles and piles of information related to the question that I wasn't able to fit in due to the recent discovery (information found within the last week of submission), the little time I had left, and the restrictive word count I had to abide by. If the deadline was on my terms, I would ensure to the best of my ability that all this information would be included in great analytical detail.