Statement of Academic Integrity

My signature below certifies that I have complied with the University of Pennsylvania's Code of Academic Integrity in completing this portfolio.

Name (printed): Maxx Yung

Signature/Date: Maxx Yung, 04/29/2024

Statement of Academic Integrity	1
Letter of Reflection	3
Final Draft of the Op-Ed and Post-Outline	4
Final Draft of the White Paper and Post-Outline	5
One-on-one peer review of a colleague's Op-Ed	6
A copy of the document you reviewed	8
On Demand Writing 2	9
Op-Ed Pre-Outline - Rhetorical Situation	10
Op-Ed Pre-Outline - Logical Outline	11
Op-Ed Early Draft	12
Op-Ed Model	13
Your colleagues' Peer Reviews of your Op-Ed (Draft 1)	14
Your colleagues' Peer Reviews of your Op-Ed (Draft 2)	15
Your multiple reviews of classmates' Op-Ed work (Draft 1)	16
Your multiple reviews of classmates' Op-Ed work (Draft 2)	19
Op-Ed Revision Plan(s)	23
White Paper Pre-Outline - Rhetorical Outline	24
White Paper Pre-Outline - Logical Outline	25
White Paper Early Draft	26
White Paper Midterm Draft	27
Your colleagues' peer reviews of your White Paper	28
Your multiple reviews of colleagues' White Paper work (Draft 1)	30
Your multiple reviews of colleagues' White Paper work (Draft 2)	32
White Paper Revision Plan(s)	33
Resume	35
Job Cover Letter	36

Letter of Reflection

Dear Faculty Readers:

I'm studying Materials Science and Engineering (1 of 16 for the class of 2027!) with a minor in Computer Science and Engineering Entrepreneurship. I would say that I'm a very avid reader, attempting to read at least 2 hours a day - primarily through newsletters, books, and journal articles for my research. I enjoy writing both creative works and long analytical works, especially on new technologies or companies working on interesting problems. In my free time, I enjoy reefing and playing badminton!

I didn't find the MicroRhetoric and Private Sectors modules to be particularly challenging, but I would say that the most challenging aspect was grasping the nuances of the communication forms used to persuade an employer to hire you. I did find the MicroRhetoric and Private Sectors modules to be one of my favorite modules though. I found the MR module to be super interesting, because I have never even considered that, and was a personally relevant course material to me. The Private Sector module was also extremely useful, as I'm sure my peers and I all have to apply to jobs in the near future. Learning to refine my resume and cover letter was not only practical but enjoyable as I learned how it could be applied to my future.

This challenge connected to my prior knowledge of rhetorical devices and persuasive writing techniques acquired in previous English classes. However, the MicroRhetoric and Private Sector modules delved deeper into the application of these concepts in real-world scenarios. While I was able to build upon my existing knowledge, this challenge required me to think more critically about the intentions behind the use of specific language, especially in the resume and cover letters. To meet this challenge, I relied on what I learned in class to revise my resume and cover-letter (for example, adding a proper and standard header, structuring the cover letter specifically to appeal to what a job recruiter might be looking for, etc), which I found to be beneficial in ingraining that knowledge from lecture into real-world applications (this topic is coincidentally my op-ed topic!)

Through this challenge, I learned that I was actually very interested in the psychology behind persuasive communication and how it shapes our perceptions and decisions - for example, on AAVE and how that affected the court trial as we saw in the video shown in class. In terms of writing, I have gained a greater appreciation for the importance of considering the audience's perspective when crafting an argument or message (particularly in the resume and cover letter). Moving forward, I plan to apply this knowledge to my future writing, especially during job searches, ensuring that I am using these techniques to effectively communicate my ideas.

Sincerely, Maxx Yung Final Draft of the Op-Ed and Post-Outline Attached below.

Final Draft of the White Paper and Post-Outline Attached below.

One-on-one peer review of a colleague's Op-Ed

For Shubham Dixit's Op-Ed, reviewed by Maxx Yung (me).

Propositional Content: Mostly meets expectations

- I assume the prop is: As educators and parents... unleash the full potential of VR... its ability to create immersive, interactive... bridge the gap between education...
 - Consider: Combining into 1 sentence and simplifying. "As educators and parents, we must embrace/adopt VR technology for its ability to create ... that can make learning better?"
- Maybe move the concession/refutation paragraph (the 2nd one?) lower down until after you have stated your points already?

Invention: Mostly meets expectations

- Good mix of sources (Stanford studies, other studies).
- Very timely problem since VR is new and this is definitely a topic of concern in education.
- Consider: Hyperlink references? Anecdotal evidence? It would fit the genre of the op-ed better and anecdotal evidence would give you a "voice" within your op-ed.

Rhetoric: Partially meets expectations

- Your intended call to action is pretty clear. Title defines the op-ed well.
- Tone and voice works well, albeit some suggestions:
 - Make some paragraphs shorter. Especially the 3rd.
 - O It doesn't read entirely conversational, almost robotic. I have a feeling it is attributed to phrases like "VR in education is more than just a brief fascination. It is a fast track to a world of opportunity." or "As we chart the course of education's future, let us anchor our decisions in the belief that the integration of VR in early education is a necessary stride toward excellence in learning." Try trimming down the fluff around the sentences that make it sound slightly robotic and monotone.
 - In relation to the above suggestion, you should add more variation to your sentence lengths. Partly why it sounds kinda robotic is the sentences are all generally really long.

Genre: Partially meets expectations

- I think the social purpose is there: to convince educators (the venue/audience) about the benefits of VR.
- The prop is good and the counterargument makes sense to me. However, some formal features need fixing: add hyperlink references, a more conversational tone by using more first person, varying sentence lengths (overall need shorter sentences), and make some paragraphs shorter.

Presentation: Partially meets expectations

- Easy fixes:
 - o Add masthead, by-line, images, and bio?
 - Add hyperlink references?

Aesthetics/Reading Experience: Mostly meets expectations

- It is well written with statistics but doesn't connect at a personal level. Mirroring suggestions provided above: Sentence lengths, shorter paragraphs, more first-person and how you think rather than as a research based op-ed.
- I would very definitely consider removing these long intro phrases throughout your essay: "As we chart the course of education's future, let us anchor our decisions in the belief that the integration of VR in early education is a necessary stride toward excellence in learning." They're very long and monotone sounding. Not sure how to un-monotone it though.

Weighted Average: B-

General Comments: Besides easy fixes like hyperlink references, adding visuals to get a perfect presentation score, some more pressing issues should be: - Rewriting some sentences to be shorter and making some paragraphs split into 2. Consider more first-person, anecdotes, and what you think about the problem, making it more like an op-ed genre than a research based, stating the facts type paper.

A copy of the document you reviewed Attached below.

On Demand Writing 2

DeliverDine CEO Statement Regarding Recent Changes

To the DeliverDine Community,

I want to first extend my deepest apologies for the confusion and inconvenience that our recent updates have caused. While we aimed to enhance our services with new membership plans and an updated smartphone app, it is clear that our execution did not meet the high standards you expect and deserve from us.

We realize that the changes to our subscription rates and the process required to adjust to our new app have not been as seamless as intended. To address this, we are taking the following immediate steps:

- 1. Account Adjustments: We are reviewing all complaints on a case-by-case basis to ensure that every member is on the most suitable plan and is fully satisfied with the terms.
- 2. App Improvements: We acknowledge the difficulties in navigating our new app and are rolling out updates in the coming days to make it more user-friendly.

Going forward, we promise to do better and will be working to restore your trust in our service.

Thank you for your continued support and understanding. Please reach out directly to our support team if you have any concerns or need further assistance. We are here to help and ensure your experience with DeliverDine continues to be pleasant.

Warm regards,

[The DeliverDine CEO name] CEO, DeliverDine

Op-Ed Pre-Outline - Rhetorical Situation

Proposition: University educators should provide greater opportunities for students to pursue passion projects for self-learning.

Audience: Most likely university staff, including professors, educators, academic advisors, etc. They are most likely interested in helping students learn better, reforming the education system. University students interested in pursuing "better" forms of education for themselves, such as projects or gap year internships may also read.

Genre: An online 600 word editorial in a popular education-based publication targeted towards university staff and students thinking about education reform.

Motive of Author: As someone who wishes to go into engineering and entrepreneurship, both of which are widely regarded as very hands on and cannot be taught in a traditional school-based environment, I wish that Penn and other schools offered their students a greater degree of independent studies and projects that could still fulfill their academic credit limits. As a student myself, I recognize that most students see assignments and the current education system as "broken" and thus aim to game the system and view assignments as grade-focused only instead of learning opportunities. My motive is thus to convince students to pursue independent studies if possible, and for university faculty and administrators to consider a greater degree of supporting independent studies from students. My other motive is to write a compelling editorial that could get me published and all the benefits that come from that.

Motive of Reader: The reader is frustrated with the current educational system, whether they are staff or students, and want to seek ways to either help their students learn better or want to find other opportunities to learn (especially in a hands-on real-world environment). Such readers will be intrigued in my personal experiences with starting a passion project, and from an engineering/entrepreneurship POV, I believe I offer some unique perspectives on this idea.

Author's Goal: To convince the reader that they should pursue passion projects or co-ops or gap year internships (students) or that expanding an independent study program or starting a co-op program is highly beneficial for students (educators), and that the current classroom based learning style is outdated.

Author's Plan: To show the reader several anecdotal examples of learning a lot from passion projects, stats on what industries say about college students (they are ill-prepared) and stats about hiring rates after graduating college, references to other universities co-op or independent study programs.

Rhetorical Strategies: Anecdotes + stats. Emotional + rational appeal!

Op-Ed Pre-Outline - Logical Outline

(Given) A university/college role is to help students learn.

(Given) Educators want to help their students learn the best they can.

(Given) Traditional education has a focus on grading, assignments, and rigid course structure that does not allow for the student to be flexible and take interesting courses.

(Given) A student within a university wants to graduate in 4 years and thus make the most of their time at university to learn and prepare for their future.

(Given) A major role of university is to prepare students for a future career.

(Thus) University staff, educators, and administrators should allow students to pursue project based, independent studies as a core of their course curriculum.

(Because) The college education's rigid course selections may not be in a student's interest. (For example) Many students complain about General Requirements that are not related to what they want to pursue.

(Because) Traditional courses do not reflect the experiences in a real-world career environment. (For example) Learning "entrepreneurship" by studying previous case-studies does not teach students to actually launch and run a business and the processes involved in it.

(Because) Students interested in their passion projects will rapidly learn more and provide a better learning experience reflective of a real-world career.

(For example) Personal anecdote of doing research and understanding biology versus a biology class.

(Because) University focuses too much on grading, leading to students achieving the highest grade rather than truly learning.

(For example) The rise of GPT and AI in education proves that assignments are viewed as mundane and unimportant to a student's learning.

(Some may argue that) integrating project-based learning and independent studies into the existing curriculum poses significant logistical complexities, such as the need for specialized faculty expertise. However, many universities are often the greatest talent density in many fields compared to anywhere else.

Op-Ed Early Draft

Attached below.

Op-Ed Model

Attached below.

Your colleagues' Peer Reviews of your Op-Ed (Draft 1)

Peer Reviewer

Caroline Zimmer

Propositional Content

Mostly meets expectations

prop in paper is explanatory, maybe use the prop in the outline, but it nicely communicates a refutable argument

Invention

Meets and sometimes exceeds expectations

Use of personal accounts to create reasons for argument
works well in some places

Rhetoric

Mostly meets expectations

Tone and voice works well, Some personal accounts don't add much to the argument, reasons reflect invention, maybe use more research-based evidence to further back argument in place of some personal accounts (ex. statistics of how students learn, effect of AI, effects of co-op experiences, etc)

Genre

Mostly meets expectations

Can include school administrations / school boards in the audience, might want to target op-ed less towards students themselves (goal strays from the motive) since the prop is more applicable to school administrators, shows expertise

Presentation

Consistently exceeds expectations

Good use of links, nice paragraph length

Aesthetics/Reading Experience

Meets and sometimes exceeds expectations Interesting topic, format looks good, would like to see more research based evidence to support reasons

Weighted Average

A-

Peer Reviewer

William Hong

Propositional Content

Mostly meets expectations

The Op-Ed centers around a justificatory proposition and there is a valid counterargument presented. I would bold the proposition for ease of identification.

nvention

Meets and sometimes exceeds expectations

The Op-Ed integrates a lot of personal anecdotes which

I find compelling. It speaks to a current, timely debate
about the hands-on effectiveness of school education.

The writing also points to various articles which
support his position.

Rhetoric

Meets and sometimes exceeds expectations

Paragraphs are short and readable. Clear title signals the writer's position.

Genre

Meets and sometimes exceeds expectations

Presentation

Meets and sometimes exceeds expectations Sources are hyperlinked and it is written in a wellpresented Op-Ed format.

Aesthetics/Reading Experience

Meets and sometimes exceeds expectations

The content was interesting and engaging to me.

Weighted Average

Α

General Comments

Great job overall. The only minor suggestions I have are to simply hold your proposition so it's easier for the reader to identify. Additionally, I think that you can have a better ending for your conclusion. You simply end off with saying Drexel and Northeastern have recognized the value. However, I think the ending sentence could be extrapolated to be more general and forward-looking.

Peer Reviewer

Natalie Pan

Propositional Content

Partially meets expectations

Your proposition is clear in your outlines, but I think it got lost in your op-ed. I'm also not sure that your introduction fully sets up your proposition. For example, I'm not sure how your distinction of "students growing up in the age of artificial intelligence" relates to your argument. Furthermore, it is a bit confusing that your second paragraph starts with "One reason..." even though you have not yet introduced your proposition. Finally, I think it would be useful to have more evidence backed by outside sources rather than solely using your personal experiences to support your argument.

Invention

Mostly meets expectations

I think this topic is important and very relevant for any college student! I liked how you mentioned what other universities have done.

Rhetoric

Mostly meets expectations

I liked your use of a personal anecdote and the quote from Mark Twain. It might be useful to use some numerical data as well (ex. statistics about the number of students who...).

Genre

Meets and sometimes exceeds expectations Your tone is appropriate for the op-ed genre. Your piece is persuasive/argumentative and informative.

Presentation

Meets and sometimes exceeds expectations

I liked how you broke up your op-ed into smaller
paragraphs with clear signposting for the introduction
of your reasons and counterargument.

Aesthetics/Reading Experience

Meets and sometimes exceeds expectations I enjoyed reading this op-ed!

Weighted Average

B+

Your colleagues' Peer Reviews of your Op-Ed (Draft 2)

Peer Reviewer

Charlotte Lew

Propositional Content

Meets and sometimes exceeds expectations

Proposition is justificatory and is properly set up with context and premises. I also really like the anecdote.

Invention

Meets and sometimes exceeds expectations

I like how you used yourself as an example and reason. It was compelling and puts a personal voice to the op-ed

Rhetoric

Meets and sometimes exceeds expectations

Premises address the knowledge of the reader and the selection of reasons and evidence are relevant to the target audience.

Genre

Mostly meets expectations

Visual and article heading are accurate. Is the small text under the photo a citation? Also, some paragraphs are a little long.

Presentation

Meets and sometimes exceeds expectations

No spelling or grammar errors and is attentive to the

Aesthetics/Reading Experience

Meets and sometimes exceeds expectations it was very engaging all throughout and is persuasive throughout.

Weighted Average

Α

General Comments

I think you could add more to the counterargument as its a lot weaker than your other points.

Peer Reviewer

Shubham Dixit

Propositional Content

Mostly meets expectation

Your introduction is beautifully written. While I don't believe that your proposition is bifurcated, I can see how one may find this statement to be far too lengthy.

Additionally, maybe I'm being overly critical since this is a designated feedback session, but I don't believe that an audience is ever explicitly mentioned. Are you speaking directly to the university administration? Are you speaking to Penn's administration? Are you speaking to current college students? Are you speaking to parents? Are you speaking to prospective college students? After reading the entirety of your paper, it appears that you are targeting Ivy League universities - unfortunately, this was not apparent throughout.

Invention

Mostly meets expectations

You pose many unique arguments that many college students think about and agree with - I doubt there's much literature about this. I appreciate you using personal experiences too, which is what the essence of an op-ed is, but I would highly recommend expanding on your last paragraph. You've left readers on a clifthanger - tell us about what the benefits of these coops are; what are some interesting things about them?

Rhetorio

Mostly meets expectations

I would give you 4 points on this, but you need to include sufficient counterarguments, refutations, and concessions. I believe that you allude at this but that is not enough. Other than that, once you are able to identify and clearly refer to your target audience, I'm sure that this piece will be complete.

Genre

Meets and sometimes exceeds expectations

I'm not allowed to give you a 5, so I'll give you a 4, but
your writing encapsulates the full essence of what an op-

ed should be. Presentation

Meets and sometimes exceeds expectations

Hyperlinks are present and there don't appear to be any

obvious grammatical errors

Aesthetics/Reading Experience

Meets and sometimes exceeds expectations

I'd say that this is pretty persuasive and compelling - I enjoyed reading your op-ed.

Weighted Average

Α

General Comments

Great overall, I'm sure that this will be at least an A after making the aforementioned edits.

Your multiple reviews of classmates' Op-Ed work (Draft 1)

For Natalie Pan

Propositional Content: Meets and sometimes exceeds expectations

Prop is justificatory and very clear and concise. Counter-argument is valid and related to the prop. - My initial reaction would be to USE AI regardless of its current accountability concerns, because it offers greater accuracy in certain scenarios, and would save lives. Have you considered which POV argument works better for your case?

Invention: Meets and sometimes exceeds expectations

Lots of evidence (but little anecdotal evidence), but the topic at hand speaks to a very current and timely debate. The sources provided are relatively new, and the argument being presented is somewhat unique in its view: better accountability (ethical) policies for AI prior to AI. - Perhaps add additional anecdotal evidence.

Rhetoric: Mostly meets expectations

Short sentences and paragraphs, and a clear title that signals your position. The background is solid as it is aware of what the readers generally know about AI and its use in medicine. I would recommend a clearer or genre specific call to action, which I feel is missing in your op-ed.

Genre: Meets and sometimes exceeds expectations

Solid understanding of the op-ed genre. One recommendation to better hone into that genre is: - A better call to action, or a clearer one is needed in the conclusion is my rec, such that the conclusion is not simply just a rehash of the entire op-ed. The conclusion is also a built in counter-argument, which may be confusing. - Try splitting the conclusion into a counter argument and a proper call to action conclusion.

Presentation: Meets and sometimes exceeds expectations

Short paragraphs and sentences. Hyperlinked references. Not much comments but: - Fix some grammar and spelling, such as "lysis" instead of "analysis"?

Aesthetics/Reading Experience: Mostly meets expectations

Overall persuasive, but does not personally connect with the readers. - I think it is hard for a reader to feel very personally connected with AI and medical malpractice. It seems very foreign. Perhaps you could present a theoretical scenario... "how would you feel if ..." and add an example related to AI and medical diagnosis. - Text is enjoyable to read, but perhaps try to make the text read less like a formal academic article? Still shorter sentences in some areas, more distinct style of writing that isn't like a formal academic paper, etc

Weighted Average: A

For Caroline Zimmer

Propositional Content: Mostly meets expectations

Assuming this is the prop: In order to counteract this growing issue, schools must implement structured, effective nutrition education programs in primary and secondary schools to instill foundational knowledge of healthy nutrition in children. I'm not sure if you have to: 1. replace must with should 2. it reads justificatory 3. it might be logically incoherent/more so hard to argue, as you need to argue "structured" vs "effective", why in both "primary and secondary schools", and possibly what "foundational knowledge" entails. I think the counter argument could be expanded more: - You could also tie in how better nutrition can significantly improve mental health of students (? unknown), and argue that if students are hungry, they don't learn as effectively anyways. - Maybe reference Japan which has an amazing nutrition system and still supports the other things mentioned. But I think the counter-argument is a valid counter-argument (it's what I thought about too).

Invention: Partially meets expectations

It's hard for me to think of actionable advice to increase the "invention" of your paper. I feel that many of the arguments made here are similar to articles you can find online - that is, without a unique take. Regardless, some advice: - Is there a way to tie in personal anecdote with "why" you are writing this or the relevance of this work to you and your audience? - The reasons and evidence are standard, but there are a lot of reasons and evidence (but no anecdotal ones!), which is good. If you could approach it from a new angle, such as tying in a potential rise in misinformation among the internet or something. - But the problem you are addressing does speak to a timely and current debate as misinformation rises + growing number of eating disorders.

Rhetoric: Meets and sometimes exceeds expectations

I think overall good rhetoric: - Easy to read, expects a reasonable amount of information from what the readers might know or believe. - Writing style is varied and not simply long sentences. However, some paragraphs could be broken down, especially starting with "nutrition education doesn't..." - Possibly a more substantial counterargument needed? - Shorter paragraphs in some areas. Particularly "nutrition education doesn't..." Some sentences should be shorter (the counterargument graph is 2 very long sentences). - Clear title, no comments.

Genre: Mostly meets expectations

- Unsure if your prop should be rephrased with "should" instead of "must". They are both justificatory to me though. - Conclusion should be more in align with an op-ed in my opinion, not simply a summary of the article but more of a call to action. - Lots of good examples and sources but since you have a personal experience with this topic, perhaps tie in anecdotal evidence to not make it sound like an academic essay?

Presentation: Meets and sometimes exceeds expectations

- Sources are hyperlinked. - Fix some grammar and spelling and extra spaces: "an effective" or "addresses"

Aesthetics/Reading Experience: Meets and sometimes exceeds expectations

Text is persuasive and compelling and not a boring read based on the evidence provided, but I feel that it does not cause the reader to personally connect with the idea presented in the text. - I would say try an anecdotal evidence if possible? - Have a better clearer actionable call to action that allows a reader to connect and understand the ideas you are trying to push. - Maybe be more in tune with the readers' reading experience, such as adding rhetorical questions for engagement.

Weighted Average: B+

General Comments: Overall very nice and only a few minor and quick corrections in my opinion to make this op-ed engaging and clear.

Your multiple reviews of classmates' Op-Ed work (Draft 2)

For Shubham Dixit

Propositional Content: Mostly meets expectations

I assume the prop is: As educators and parents... unleash the full potential of VR... its ability to create immersive, interactive... bridge gap between education... Consider: - Combining into 1 sentence and simplifying. "As educators and parents, we must embrace/adopt VR technology for its ability to create ... that can make learning better?" - Maybe move the concession/refutation paragraph (the 2nd one?) lower down until after you stated your points already?

Invention: Mostly meets expectations

- Good mix of sources (Stanford studies, other studies). - Very timely problem since VR is new and this is definitely a topic of concern in education Consider: - Hyperlink references? - Anecdotal evidence?

Rhetoric: Partially meets expectations

Your intended call to action is pretty clear. Title defines the op-ed well. Tone and voice works well, albeit some suggestions: - Make some paragraphs shorter. Especially the 3rd. - It doesn't read entirely conversational, almost robotic. I have a feeling it is attributed to phrases like "VR in education is more than just a brief fascination. It is a fast track to a world of opportunity." or "As we chart the course of education's future, let us anchor our decisions in the belief that the integration of VR in early education is a necessary stride toward excellence in learning." - In relation to the above suggestion, you should add more variation to your sentence lengths. Partly why it sounds kinda robotic is the sentences are all generally really long.

Genre: Partially meets expectations

I think the social purpose is there: to convince educators (the venue/audience) about the benefits of VR. The prop is good and the counterargument makes sense to me. However, some formal features need fixing: - Hyperlink references as mentioned before - More informal and conversational tone, possibly done by using more first person, varying sentence lengths (overall need shorter sentences), and make some paragraphs shorter.

Presentation: Partially meets expectations

Easy fixes: - Add masthead, by-line, images, and bio? - Add hyperlink references?

Aesthetics/Reading Experience: Mostly meets expectations

It is well written with statistics but doesn't connect at a personal level. Mirroring suggestions provided above: - Sentence lengths, shorter paragraphs, more first-person and how you think rather than as a research based op-ed. - I would very definitely consider removing these long intro phrases throughout your essay: "As we chart the course of education's future, let us anchor

our decisions in the belief that the integration of VR in early education is a necessary stride toward excellence in learning." They're very long and monotone sounding. Not sure how to un-monotone it though.

Weighted Average: B-

General Comments: Besides easy fixes like hyperlink references, adding visuals to get a perfect presentation score, some more pressing issues should be: - Rewriting some sentences to be shorter and making some paragraphs split into 2. - Consider more first-person, anecdotes, and what you think about the problem, making it more like an op-ed genre than a research based, stating the facts type paper.

For Charlotte Lew

Propositional Content: Meets and sometimes exceeds expectations

Assuming your prop is: The effects of human-caused climate change is undeniable and it is time for animal agriculture corporations to take responsibility for their environmental impact by implementing sustainable practices. - I would split the first half. I think it is easy to do something like: The effects of human-caused climate change is undeniable. It's time for animal agriculture corporations to take responsibility for their environmental impact by implementing sustainable practices. The prop is well-written and clear. Your concession makes sense. No further comments there.

Invention: Meets and sometimes exceeds expectations

Very densely inter-linked references with a heavy focus on stat evidence over anecdotal. Which makes sense. Topic is also timely. The synthesis of your references and your assumptions from it make a lot of sense, especially "Despite the fact that these methods can reduce emissions up to 60% and are easy to implement, no large corporations are making changes due to loose policies and loopholes."

Rhetoric: Meets and sometimes exceeds expectations

Clear awareness of targeted readers who are concerned about the env while not knowing much of the factory farming industry. Suggestions: - Some sentences and paragraphs are quite long.

Genre: Mostly meets expectations

Social purpose is fine - audience via venue is clear and the call to action is clear. For the formal features, consider: - More informal and conversational tone. What do you think about the solution, rather than presenting it as a research based paper? It is your opinions after all. - Shorter sentences and paragraphs overall. - Perhaps try using more first-person? - Might not be significant, but what is the call to action? I think a lot of people, myself included, understand that climate change and the farming industry to be env damaging, but this seems to not have a defined call to action. Which again can be fine, but might want to consider. Revise conclusion if so.

Presentation: Consistently exceeds expectations

No fixes. You have all the visuals required. Aesthetic suggestions below.

Aesthetics/Reading Experience: Mostly meets expectations

The content was interesting and engaging to me. Suggestions: - Pretty information dense. - Remove accidental double spaces " " between words. - Why do some paragraphs have spacers and others don't? - It's hard to connect on a personal level when its purely factual/based on statistical research. This can be totally fine and may be graded without this concern in mind, but

just letting you know. - Your conclusion falls off. I would recommend straight up removing "In conclusion." The phrase "the time is now" or "now is the time" is repeated 3 times in similar ways, which seems repetitive.

Weighted Average: A

General Comments: Very minor fixes, overall very good. - Probably change conclusion a bit - Shorter paragraphs and sentences - More informal and conversational tone.

Op-Ed Revision Plan(s)

Draft 1

I think a lot of suggestions revolved around fitting my prop earlier in the argument and adjusting it to be shorter and more concise, which is what I want to do. Now, it should be more clear what I am trying to argue for.

A lot of people have said that my anecdotal evidence was very compelling (something that is working well); however they wanted to see more numbers based evidence. For my next revision, I would include my statistics, but I don't want to overdo it because it should be an op-ed with my voice and opinions, and I would want to keep it that way.

My presentation seems to be pretty good - it was engaging, interesting, and had nice paragraph lengths. I will keep it that way for the next revision.

For my future revisions, based on some feedback, I would remove some of my anecdotes that are less related with what I am arguing for (such as the AP Bio example), and I would remove AI from the proposition since that confuses the readers and make it more complex than necessary.

Draft 2

Regarding my prop, my reviewers agree that the prop is well set up with the context and premises.

However, my target reader and audience were not as well established. For my next revision, I would explicitly mention my audiences and who I am targeting. That would be university administrators specifically. I would also cater my language more towards university administrators over university students.

My paragraphs also got slightly longer, so I will need to split them up or remove them to keep my op-ed shorter.

The anecdotes continue to be doing well, people find it engaging and give my op-ed a unique voice rather than a bunch of statistics. This is something I will continue to do.

Finally, there is a general consensus to expand on my conclusion and counterarguments, which is what I will do for my next draft. I will add more about what Drexel and Northeastern is already doing with their co-op programs, and end with a call to action on how universities should be following Drexel and Northeastern in how they implement co-op learning to allow students to pursue independent and real-world projects.

White Paper Pre-Outline - Rhetorical Outline

Proposition: AI training, deployment, and research needs to be made significantly more energy efficient to align with climate change goals.

Audience: Chip companies, deeptech venture capitalists

Genre: White paper

Motive of the Author: To promote biologics-based computing for investment and R&D Motive of the Reader: To recognize the climate problems caused by AI & to fund biologics-based computing and support climate tech solutions in the long-term Plan: Publish as a company white paper research (similar to Bitcoin's whitepaper:

https://bitcoin.org/bitcoin.pdf), publish in TechCrunch or related site

Rhetorical Strategies: No idea what this means!

Keywords: AI, climate, energy, biologics-based computing, biocomputing, neuromorphic

computing

White Paper Pre-Outline - Logical Outline

Premise

Given that AI has undergone recent explosive growth in the past 5 years Given that AI development shows no sign of slowing down and is actually accelerating Given that AI research requires computers (GPUs) to train, which requires energy Climate change is a major problem which is mainly caused by carbon emissions from human activities

Proposition

Thus, AI training, deployment, and research needs to be made significantly more energy efficient to align with climate change goals.

Reasons & Evidence

(How) Current silicon chip design should be abandoned in favor of newer technologies

- Because Silicon chips are not inherently energy efficient due to the memory gap problem
- Because Silicon is unsustainable as the world enters into a silicon shortage
- Because Silicon chips requires massively amounts of energy in order to cool
- Because Silicon technology is reaching the limits of physics and can no longer be advanced at a rate suggested by Moore's Law

(How) Focusing on massive clean-energy supplying technologies is a long-term goal that will make AI training more climate friendly

- Because Developments in solar and nuclear technologies are decades away from feasible scalability
- Because Clean energy from solar and nuclear technologies will be a long-term solution for supplying clean energy for data centers
- Because Clean energy from solar and nuclear technologies is not favored or implemented by companies currently due to high upfront costs and low efficiencies and a lack of pressure to reduce their climate impact

(How) Biologics based chips should be developed for AI specific training and deployment

- Because Biologics-based chips are inherently 10000x more efficient than silicon chip
- Because Biologics-based chips uses less silicon and is thus sustainable in the long term future
- Because Biologics-based chips do not generate heat and thus use less energy
- Because Biologics-based chips have undergone 4 billion years of evolution, resulting in both energy efficiencies and fast processing power

White Paper Early Draft

Attached below.

White Paper Midterm Draft Attached below.

Your colleagues' peer reviews of your White Paper

Instructor Reviewer

Brian Cannon

Propositional Content

Partially meets expectations

 $The \ prop\ can\ be\ better\ set\ up\ in\ the\ Intro\ by\ immediately$ focusing on the specifics of the env. problem; what is the relationship here, and how might you frame this as a particularly environment issue, beyond just basic detail on AI (which would already be known to audience)? Prop itself is sufficiently focused for this stage. LoR does not flow esp. well; History and How Models Trained sections largely not needed, instead the focus should be directly on energy use and $environmental\ costs.\ Pay\ particular\ attention\ to\ transitions;\ it\ is$ unclear how many of these sections relate to one another without clearer linking sentences. Note the language of the ${\it Mutually Exclusive section is the type of focused rhetoric you}$ want to begin the paper with!

Invention

Partially meets expectations

The topic is timely and well-suited to the WP genre. Without ${\it clear source\ citations, it\ is\ impossible\ to\ gauge\ synthesis;\ please}$ make this a priority for draft 2.

Rhetoric

Partially meets expectations

Avoid use of "we" and "our" throughout; this collective voice is not typically employed in the WP genre. Intro should explicitly flag target and secondary audiences: who are the stakeholders in this issue? Those mentioned in rhet. outline are likely viable but need explicit attention in body text. Solutions should be particular to to the target audience; aim to refine this in successive drafts by considering what your flagged stakeholders specifically have done to address the issue, or what might be of

Partially meets expectations

 $The\ paper\ does\ not\ adhere\ esp.\ well\ to\ the\ formal\ elements\ of$ the genre. Re-visit the samples we read in class for examples of these, and pay close attention to length (this draft is far too long, aim for relevance to env. issue and concision throughout), structure in clear prob/sol'n format, layout, and tone. Socially, $the\ paper\ struggles\ to\ exhibit\ audience\ awareness\ without\ clear$ $language\ directed\ towards\ named\ stakeholders.$

Effort made but insufficient to meet expectations Paper title can better signal thrust of main argument; what problem is this WP looking to solve? Paper includes no citations for text and most visuals, and biblio. is listed as URLs only; these should be clearly ID'ed and formatted per Chicago style for draft 2.

Aesthetics/Reading Experience

Partially meets expectations

 $This\ draft\ is\ hindered\ by\ a\ plethora\ of\ detail\ that\ is\ less\ relevant$ to the immediate problem at hand on env. costs, and so makes $\,$ the paper less engaging throughout.

Weighted Average

General Comments

Major areas of focus for revision: source synthesis; language $scaled\ to\ stakeholders; logical\ flow\ in\ argumentation;\ attention$ to genre elements; citation practice.

Peer Reviewer

Dominic Chang

Instructor Reviewer

Brian Cannon

Peer Reviewer

Simon Lee

Propositional Content

Mostly meets expectations

I think you did a good job of setting up your premise which is that AI is unsustainable right now. Maybe you could make it more concise.

Invention

Mostly meets expectations

I think that this is a creative and nontrivial solution to the problem you describe. You've coherently brought together a variety of different sources.

Rhetoric

Mostly meets expectations

I think that your language is appropriately technical to the level of the audience. Just something I'm wondering: You have three distinct readers. The level of understanding a pure AI researcher has about chips might be significantly different from a chip manufacturer. Maybe narrow the "AI researcher" reader to "AI computing researcher?"

Genre

Meets and sometimes exceeds expectations

The paper meets all of the white paper content requirements.

Presentation

Meets and sometimes exceeds expectations

The paper is organized and the visuals are put at appropriate locations. I think you could introduce subheadings to to ensure that a reader that skims can easily find information.

Aesthetics/Reading Experience

Mostly meets expectations

I like how you create personal connections by mentioning pertinent global issues such as the global climate crisis.

Weighted Average

B+

General Comments

I think you're on the right track. Conciseness could be helpful generally.

Your multiple reviews of colleagues' White Paper work (Draft 1)

Reviewer: Maxx Yung Submitter: Dominic Chang

Propositional Content: Meets and sometimes exceeds expectations, 4

- The prop is short (which is good) but further define "proper" within your prop. Proper should be defined within a premise, perhaps something along the lines of "lacks proper regulation to ensure it isn't abused" or something similar.
- The background/intro sets up the prop nicely, and it was easy to follow along.

Invention: Partially meets expectations, 2

- I believe your solutions to your defined problem is mostly a summary of various statements put out by the organizations you mentioned in your paper, and not really your own thoughts. Your analysis is what the 3 organizations have said instead of your own proposed solution. I know you didn't finish, but when you write "it becomes clear that crypto needs specialized regulation", are you going to input your own unique view on the regulations?
- However, I do believe this paper is timely, as crypto is starting to gain more steam in the financial sector.

Rhetoric: Partially meets expectations, 2

- You are targeting crypto interest groups and regulating entities, so you would need to frame your paper at a higher level since these major institutions would know a lot more than the introductory statements you provide. You would probably need to go more into specific details regarding this problem, such as specific legislations passed and previous attempts to solve this problem. I think this will be hard to do as someone who isn't an expert in crypto legislation, though.
- Find and cite real life examples of crypto regulations, what worked, and what didn't, like case studies, I feel like that would be more engaging to the targeted audience of what regulations they should implement based on prior ones.
- Ultimately, I think your paper and the language used throughout the paper is scaled for more of a general audience and not for crypto organizations who should be very knowledgeable of this field beyond the introductory comments.

Genre: Meets and sometimes exceeds expectations, 4

- Proper use of citations, titles, and subheading to allow for skimmability.
- Clear social purpose: calls for more crypto regulation.
- You would probably need to work more on "Genre knowledge entails understanding what readers expect from the genre, what reader/writer relationships the genre creates and generates, how, when, where and why to use one genre rather than another, and what the

motives are of the genre's author and readers" If targeting regulatory bodies, you would probably need a more defined solution path as stated above, and go into what works and what doesn't work right now in terms of crypto regulation.

Presentation: Meets and sometimes exceeds expectations, 4

- Nice presentation of your work. Some minor grammar mistakes that can be fixed easily.
- I would add bullet points/numbers everywhere possible for readability. For example, maybe a table for the "International Consensus" section, since I think that can all be summarized nicely in a giant table.

Aesthetics/Reading Experience: Mostly meets expectations, 3

- Ignoring lack of images, I would say add more tables in certain sections, and try to bullet point as much as possible (my personal preference) but it makes info easier to read and skim (which apparently is very big since we have to assume "people won't read your entire paper")
- Paper is well-written, and as someone who is interested in crypto, I found the paper engaging from a not-well-educated-in-crypto-legislation viewpoint.

Weighted Average: B+

General Comments

- Fix minor grammars
- More images, more tables, more bullet points.
- If you are going to continue targeting regulatory bodies in crypto, I think adding specific case studies would be valuable.
- Consider another audience group, such as voters to pressure certain crypto regulations.

Your multiple reviews of colleagues' White Paper work (Draft 2)

Reviewer: Maxx Yung Submitter: Simon Lee

Propositional Content: Mostly meets expectations, 3

Easily understandable prop and tailored for the target audience. Background provides solid information to demonstrate AI bias and why that's important.

Invention: Partially meets expectations, 2

Good solutions to problems. I feel for HR specialists, some of these solutions are out of their control and more tailored for people making the model for recruitment. Based on initial reading, solutions seem to be the common solutions already pursued by companies.

Rhetoric: Mostly meets expectations, 3

Scaled for HR specialist audience well, the information is understood for a non-specialist in AI, the table makes it an easy summary. Only question/concern is HR specialists grasping the more specialized terms in AI, and the relevance to them since they do not manage or alter the models they use.

Genre: Meets and sometimes exceeds expectations, 4

Sounds like a white paper. Throughout it, aims to convince that this topic is a problem, and provided context for HR specialists on why it is a problem, and offered a better understanding of the solutions.

Presentation: Consistently exceeds expectations, 5 formatting and grammar, etc, looks fine.

Aesthetics/Reading Experience: Partially meets expectations, 2 too text heavy, even if it is broken up with lots of headings. need more images, figures, tables.

Weighted Average: B+

White Paper Revision Plan(s)

Draft 1

Valuable Suggestions:

- The prop can be better set up in the introduction by making the introduction shorter and focus on the relevant specifics of the environmental problem. How is it an environmental issue beyond AI?
- LoR does not flow well
- Pay attention to transitions as it is unclear how sections relate to each other.
- Intro should flag the stakeholders in this issue both target and secondary audiences.
- Draft is too long and not a formal white paper structure.

Invalid/Non-Applicable Suggestions:

- No clear citations and unclear title.
- Avoid the use of "we" and "our"

What is Working Well:

- Prop is good.
- Topic is timely and well-suited to the WP genre.

Action Items:

- Removed the extensive background section on History of AI and Training AI Models to focus more on the environmental impacts of climate change (energy usage associated with data centers and the consequent carbon emissions impact) which should also simplify the Line of Reasoning
- The first draft had paragraphs out of order for drafting purposes will rearrange the paragraphs to have the correct order and transitions, which should help with the LoR and make clear how the sections relate to each other. In the end, it should have a proper problem, solution format and layout.
- My citations were in Google Doc comments, which did not get translated onto the PDF. For the next draft, I will simply move the citations into the actual paper in the Chicago format.
- Unsure of not using "we" and "our"... need more clarification. Didn't the McKinsey paper we read use "we"? Also the linked whitepaper published by Bitcoin foundation used "we" and "our" in their white papers.
- Directly mentioned target and secondary audiences in the prop, which were "deeptech VCs, chip manufacturers, and AI researchers" and specifically mentioned how problems/solutions can affect the audiences.
- Added a paper title: Biocomputing as a Solution for Future Sustainable AI Developments A White Paper Advocating the Development of Biocomputing for Venture Capitalists, AI Researchers, and Chip Manufacturers
- Adjusted tone to be more "white paper" formal.

Draft 2

Valuable Suggestions:

- Make background more concise (I agree that it is long)
- My language is not scaled technically to all my distinct readers, which I said was AI researchers, chip manufacturers, and VCs.
- Add subheadings to make my paper easier to skim.

Invalid/Non-Applicable Suggestions:

N/A

What is Working Well:

- Setting up the premise that AI is unsustainable.
- Creative, nontrivial solution to the problem after analysis of shortfalls of current solutions
- Genre is like a white paper.
- Organized and has lots of visuals.

Action Items:

- Based on the valuable suggestion to make my background more concise, I aim to shorten the background section. My first step would be to remove repetitive details, as I cited many examples of the same topic or idea to reinforce an idea. I might also cut down more on the introduction section, particularly within the paragraphs that highlight the explosive growth of AI (beginning 2-3 paragraphs). But the heavy use of graphs and figures I think serves to reinforce my premise, so I will not remove graphs and figures from my introduction. My question is also: since I want to continue this writing past this semester and write a longer and more substantial white paper, should I write a short white paper for the class specifically and expand on it after the class ends?
- I need to figure out how to scale my language to all my distinct readers. For example, AI researchers would know a lot about AI but not a lot about chip solutions, and vice versa for chip manufacturers, while VCs in general would have a lower knowledge of this entire field. How can I accomplish this? Need more assistance here. I might start off by narrowing my audience to purely deeptech investors and chip manufacturers. For investors, I will lean more heavily towards selling the introduction section to reinforce the idea that this is a big problem with lots of monetary potential, and for chip manufacturers, I will lean more heavily on problem section to show that current "solutions" to mitigating the AI energy crisis is flawed, and then lead them onto the solutions section. Both VCs and chip manufacturers should have a basic understanding of the problems associated with traditional semiconductors.
- As per the received suggestions, I will add a lot more subheadings to differentiate between certain paragraphs, for example in the solutions paragraph I would have subheadings on "Heat", "Bottlenecks", "Sustainability", etc. Overall, it would make it easier to skim.

Resume

Attached below.

Job Cover Letter

Attached below.