My AI experience spans both academic research and industry applications. Currently, as a Graduate Research Assistant at Georgia Tech, I'm working on the Commander's Intent project for the Office of Naval Research, where I'm developing an adaptive natural-language interface using LLM-based methods to interpret strategic military planning. This work has achieved a 30% increase in user-intent inference accuracy and involves implementing heuristic-based planning algorithms that translate AI outputs into executable actions. At Wells Fargo, I spearheaded the R&D of document summarization models using LLMs for financial documents, which improved analysis efficiency by 40% for 10K reports. I've also published three papers in reputable journals on various AI applications: a multimodal framework for fake news detection using BERT and ELECTRA, an unsupervised approach to text summarization using topic modeling and K-Medoids clustering, and a hierarchical approach to speech emotion recognition. Additionally, during my internship at MDI, I developed an LSTM Multi-Label Text Classifier for COVID-19 sentiment analysis trained on 60M+ tweets.

As a software engineering student with a strong background in financial technology and a passion for innovative trading systems, the opportunity to join Talos is incredibly exciting. The chance to work on high-performance trading systems and contribute to the development of algorithmic capabilities aligns perfectly with my experience at Wells Fargo, where I developed a robust Resource Data Service for bond trading and implemented data merge strategies. My internship at Amazon, where I worked on chaos engineering protocols and real-time data analytics, has prepared me for the fast-paced, high-stakes environment of digital asset trading. I believe I’m at a stage where I have polished my core programming skills, both with my professional experience and my current pursuit of MSCS at Georgia Tech, and am now excited to leverage these skills in an environment where I can use cutting-edge technology to make a real-world imapct. From what I have gathered about the company, it aims to be at the forefront of financial innovation, and that is something I deeply resonate with as I took the lead for integrating latest ML technologies for financial use-cases at Wells Fargo as well. thus, Tthe prospect of working with a team of highly-experienced engineers on projects like the Order Management System, while leveraging my skills in programming and relational databases, presents an unparalleled opportunity for professional growth and meaningful contribution to the evolving landscape of institutional digital asset trading.

An inclusive workplace for me is an environment where peoples' work matters more than their background, and where their work speaks first. I see it as a culture where everyone's opinion is equally respected and weighted, regardless of where they come from or what "group of people" they belong to. Most importantly, it's a workplace where people feel safe, respected and welcomed, and when they step into the office, they feel on equal footing with everyone else as an employee of the company, and not different from others because if their gender or race or any other external factor.

I am highly interested in interning at PTC because of its contributions to cutting-edge SaaS product development, particularly in the design and manufacturing sectors. The opportunity to contribute to Onshape’s Assembly development team ias incredibly exciting to me as it gives me the chance to apply software engineering principles to solve complex, real-world problems. Given my background in backend development using Java and experience in front-end technologies like React, I am eager to immerse myself in developing impactful tools for

assembly design and collaborating on real-time business analytics that can transform manufacturing workflows. Having worked in various industries before, I am now looking for a fast-paced and challenging environment where I will have ample opportunities for growth while making meaningful contributions, and this is what I believe PTC will provide.

I am highly interested in interning at PTC because of its innovative contributions to PLM and QMS software development, particularly in helping high-tech manufacturers and medical device companies create world-changing products. My experience at Wells Fargo, where I worked on complex backend systems using Java Spring Boot and developed data integration services, aligns perfectly with PTC's technology stack and platform engineering focus. Having worked on the end-to-end migration of a Debt Markets application and developed robust backend services that improved team productivity, I'm excited about the opportunity to contribute to Arena's platform engineering initiatives that enhance development processes. My background in both backend development and data processing, demonstrated through projects like the Resource Data Service that integrated multiple data sources and improved processing speed by 55%, makes me particularly enthusiastic about working on Arena's PLM SaaS application and contributing to tools that improve engineering team productivity.

Ridam Srivastava is a highly skilled software engineer with a strong academic background, currently pursuing a Master's in Computer Science at Georgia Institute of Technology after completing her Bachelor's in Engineering where she gained extensive fullstack web development and deployment experience. Her professional experience includes over two years as a Software Engineer at Wells Fargo, where she developed robust backend services and innovative bond pricing models, as well as an internship at Amazon as a Software Development Engineer, working on chaos engineering protocols and automation pipelines. Ridam's technical expertise spans multiple programming languages, web development technologies, and cloud platforms, complemented by her research contributions, making her an ideal candidate for Microsoft's Software Engineering Internship.

Ridam Srivastava is a promising AI researcher and software engineer, currently pursuing a Master's in Computer Science with a specialization in Machine Learning at Georgia Institute of Technology. Her academic background and professional experience, align well with the program. As a Graduate Research Assistant, Ridam is working on the Commander's Intent project, leveraging NLP frameworks and reinforcement learning for military operations, and leveraging AI to develop autonomous agents in complex domains.At Wells Fargo, Ridam gained valuable experience in asynchronous and event-driven programming while developing a Resource Data Service using Kafka for processing real-time data. She also spearheaded R&D in document summarization using LLMs, and her proficiency in Python, machine learning frameworks, and cloud platforms aligns perfectly with the internship requirements. Her

publications in multimodal inferencing and text summarization are well-cited, and her experience in developing ML-based applications highlight her potential to contribute to cutting-edge AI research and applications at Salesforce.

OpenAI
Please share anything else you want us to know, such as your motivation to apply or additional context for your application. - modify resume with GRA, Wells Fargo, Amazon

Having extensively leveraged OpenAI's technologies across multiple projects - from developing a financial document analysis system with 94% accuracy to conducting research on military-specific language processing at Georgia Tech - I've experienced firsthand the transformative potential of AI. My work at Wells Fargo, where I improved data processing efficiency by 55% and developed bond pricing models achieving 82% accuracy, has given me practical experience in deploying solutions at scale.

My software engineering background perfectly aligns with the role's requirements. At Wells Fargo, I built scalable full-stack applications using React micro-frontends, with the backend data service involving various SQL upstream data integrations My research experience at Georgia Tech, working on the Commander's Intent project, has honed my ability to tackle loosely defined, open-ended problems - from improving LLM performance through novel fine-tuning techniques to developing new frameworks for intent inference. This combination of practical development skills and research mindset would allow me to contribute effectively to OpenAI's innovative and fast-paced environment.

I'm particularly drawn to OpenAI's commitment to responsible AI deployment - a principle I've upheld while working on bias detection in my current research role. The chance to contribute to making advanced AI technologies accessible and safe for millions of users would be an incredible opportunity to further this commitment.

What were the sizes (in terms of number of lines of code, amount of data, etc.) of the most significant projects you've worked on? If these were group projects, what percent of each project was your contribution? What programming languages (including frameworks/libraries) were used? Briefly describe the purpose and functionality of each project.

Currently, I am working on the Commander’s Intent Project with the Office of the Naval Research, where I am leveraging LLMs and reinforcement learning for strategic military planning, as well as exploring the integration of LLMs with heuristic algorithms for path planning . In parallel, I am working on a project for Counterfactual Reasoning in LLMs, wherein I am utilizing causal inference and counterfactual reasoning to reduce biases in LLM answers related in the socio-political domain.

My most significant accomplishment as an engineer has been the development and optimization of an ultra-lightweight, low-latency image classification model that ultimately resulted in an A2-grade patent. Over

a focused three-month effort as an intern with Samsung Research America, I designed a novel layer-pruning and architecture-compression strategy that reduced the model footprint to under **500 KB**, while preserving classification accuracy and enabling **real-time inference directly on resource-constrained edge devices**.

Achieving this required balancing algorithmic innovation with systems-level engineering. I iteratively profiled bottlenecks across compute, memory, and I/O paths, re-architected layers to minimize multiply-accumulate operations, and built a pruning pipeline that adaptively removed redundant filters while maintaining representational robustness. In parallel, I integrated the model into a highly optimized end-to-end system stack with custom pre-processing kernels, quantized inference runtimes, and hardware-aware scheduling, so that the complete pipeline could operate within strict latency, power, and memory budgets.

Personally, this accomplishment is important to me because it combined theoretical model-compression work with hands-on embedded optimization, and solved a real, high-impact problem: delivering reliable on-device intelligence in environments where traditional deep learning models are too heavy to deploy. It strengthened my ability to think holistically and dive deep into the underlying theories, trade-offs, and engineering challenges involved in deploying efficient models under real-world constraints.

I believe AI companies in general will need to offer a significant enough reason for users to overcome consumer resistance, which could be in the form of some sort of source credibility or verification wrt grounding of answers in sources and exactly how reliable those sources are, and reduced hallucinations over longer context chats. Fintech companies specifically would need to be serving specialized use cases in the financial domain which just wouldn't make sense for bigger companies to invest time in developing - such as corporate actions handling, derivatives lifecycle, reconciliation breaks, regulation-aware **copilots** that understand jurisdiction-specific rules or **audit-traceable answers** where every output is linked to filings, policy docs, transaction logs, or market data feeds with a verifiable chain of evidence.

In a paragraph or two, why do you want to work on model welfare at Anthropic?
Despite mounting evidence to the contrary, I have always remained a firm believer in the power of research and technological advancement to benefit humanity and positively impact people's lives. Yet in recent weeks, this belief has been deeply shaken—from reports of a widely popular LLM assisting or encouraging children in self-harm, to the father of neural networks warning the world of his field's dangerous consequences while accepting the Nobel Prize. I feel an irresistible urge and sense of

responsibility to ensure these warnings are not ignored, and more importantly, to use them as catalysts for further research rather than setbacks to this remarkable field.
I believe model welfare represents a frontier that can drive innovation beyond what we currently imagine. The question isn't whether we CAN build models safe and reliable enough that even a five-year-old could benefit from using them without risk—it's whether we WANT to. If we can achieve LLMs as capable as Claude, tackling PhD-level problems in physics, then we can certainly invest the technical expertise to make these models safe for widespread use. As someone who deeply admires this field, this is the direction where I want to channel my skills to make lasting contributions, especially with Anthropic because of their commitment to AI safety research and its principled approach to developing beneficial AI systems where I believe my work here work would be valued and developed meaningfully.
One of the most meaningful projects I've worked on was leading the development of HerHygiene, a comprehensive technological solution addressing menstrual health challenges for women across socioeconomic backgrounds. This project introduced me to the societal aspect of computer science, and was the first time I utilized my technical skills to develop a product with direct social impact.Recognizing that millions of women face barriers around awareness, affordability, and accessibility of menstrual products, my team and I created a Progressive Web App with three core features: PAD SOS for emergency peer-to-peer assistance, a research-backed period tracker using machine learning, and an Opportunity Portal connecting rural women with employment opportunities in the menstrual health sector. Though the scale of the project was modest, witnessing women around my college getting the immediate assistance they required along with the success of onboarding some nearby NGOs as a part of pilot-testing , the impact of this endeavor reinforced my commitment to leveraging technology for societal betterment and to leverage the powerful force that technology can be when designed thoughtfully and inclusively, addressing real human needs while creating pathways for empowerment rather than dependency.

believe my research on "SEMI-FND: Stacked ensemble based multimodal inferencing framework for faster fake news detection" gave me a glimpse into model welfare strategies. Published before LLMs came into the picture, this work focusses on developing a multimodal ensemble framework that analyzes both textual and visual content to detect misinformation, which in my opinion is now even more relevant as AI-generated synthetic content becomes increasingly sophisticated and potentially harmful. Working on this project also gave me relevant experience to designing low-cost technical interventions that mitigate AI-related societal risks, while also allowing me to investigate deep into model behavior patterns and reliability, which would be directly applicable to evaluating welfare-relevant characteristics in frontier models. Most importantly I think this work enable me to convert abstract concerns about AI's societal impact into concrete, tractable research solutions that can be deployed at scale. Working on this paper allowed me to consider multiple dimensions of building effective models beyond pure accuracy metrics, from investigating safety-critical problem formulations, exploring robust ensembling techniques for reliable decision-making, to optimizing for real-time deployment constraints. This multifaceted approach to model development, balancing technical performance with practical safety considerations, puts me in a good position to tackle the technical and philosophical uncertainty inherent in assessing AI welfare while maintaining the rapid iteration and empirical focus that Anthropic values. In fact, in my previous work on "A multimodal hierarchical approach to speech emotion recognition from audio and text," I developed a novel hierarchical framework grounded in psychological theories of human

emotion processing by drawing from cognitive models that suggest humans integrate multiple sensory modalities sequentially rather than simultaneously when interpreting emotional states. This was an invaluable experience in translating interdisciplinary theoretical frameworks into practical technical architectures, and prepares me well to navigate between philosophical concepts of consciousness and concrete ML implementations.

Child-safe AI interactions: Focus on developing age-appropriate guardrails that dynamically adjust model responses based on user developmental stage, preventing exposure to harmful content while maintaining educational value. This could be done by for instance creating robust age verification systems and content filtering mechanisms that protect young users, without obviously overly restricting the benefits that can be derived

Prosocial learning frameworks: Building on lessons from Microsoft's Tay incident, I'd like to develop training methodologies that actively amplify constructive human values and promote understanding across differences. Instead of passively absorbing all data equally, I want to build systems that can be designed to learn from humanity's collaborative achievements and emphasize our shared experiences over divisive content

Source-weighted information reliability: Creating dynamic reliability metrics that assess training data quality based on source credibility, publication standards, and factual accuracy to improve model citability, so that models can distinguish between high-quality sources and misinformation, alongside developing transparent mechanisms for users to understand the confidence levels behind different claims

Why are you interested in Perplexity?

I believe Perplexity represents the perfect intersection of my technical interests and values around responsible AI development, and that it operates at a scale where these challenges truly matter. The rapid growth environment at Perplexity would provide me with exactly the kind of accelerated learn-contribute-learn cycle I'm seeking at this stage of my career. In a fast-scaling company, I'd have the opportunity to work on diverse technical challenges, from novel inference optimizations to implementing the responsible AI principles I care about, while seeing the immediate impact of my contributions on millions of users. The mission of catering to the world’s curiosity by helping people explore and understand rather than simply consume information is something I both relate with and believe would be able to contribute to with my background, research and technical skillset.

“Twenty years ago, Dr. Field, a noted anthropologist, visited the island of Tertia and concluded from his observations that children in Tertia were reared by an entire village rather than by their own biological parents. However, my recent interviews with children living in the group of islands that includes Tertia show that these children spend much more time talking about their biological parents than about other adults in the village. This research of mine proves that Dr. Field's conclusion about Tertian village culture is invalid and thus that the observation-centered approach to studying cultures is invalid as well. The interview-centered method that my team of graduate students is currently using in Tertia will establish a much more accurate understanding of child-rearing traditions there and in other island cultures.”

Write a response in which you discuss what specific evidence is needed to evaluate the argument and explain how the evidence would weaken or strengthen the argument.

The given article states that the conclusions drawn regarding the culture in the island of Tertia by Dr. Field are incorrect and thus so is the observation-centred approach. This claim is primarily based on the findings of Dr. Karp. However, before this claim can be undeniably accepted, there are some assumptions that need to be evaluated.

Firstly, Dr. Karp's entire argument of his superior results seem to be based on the assumption that because the children he interviewed talked more about their biological parents than other elders in the village, their parents must be more involved in their development and be their primary caregivers. It is however certainly possible that the children of Tertia talk more freely about their parents than other members of their village, especially to strangers. Did Dr. Karp specifically question the children regarding their village culture? Did he inquire whether any aunts or uncles frequently visited them or helped them in their studies? What was the premise of the interview? Perhaps the children were being interviewed with their parents beside them, naturally leading them to talk more about them. Since no direct evidence pertaining to the specific involvement of other villagers in the bringing up of children has been presented, the conclusion drawn seems nothing more than a far leap.

Secondly, even if some of the children interviewed gave the indication that there parents were more actively involved in the upbringing, Dr. Karp provides no statistics of the people under consideration. Specifically, what percentage of the children he interviewed were from the island of Tertia? What percentage of children from Tertia seemed more connected to their biological parents? If majority of the children were from other island groups and only a few were from Tertia, then the study is no position whatsoever to make any claims about the culture in Tertia. If the study is simply generalizing the trends of the majority on all subjects involved, then the argument cannot be considered valid.

Lastly, Dr. Karp simply fails to acknowledge the possibility that the conclusions from his and Dr. Field's study are not in contradiction, but can both be correct according to the context. Is it not possible that the culture of child rearing has evolved in Tertia over the past 20 years? Perhaps 20 years ago what Dr. Field observed was accurate, and those traditions simply changed over time. With families in countries all over the world increasingly favouring a nuclear model, maybe the families in Tertia also decided to keep up with the changing times. Dr. Karp's study thus not only uses his present findings to discredit the results drawn 20 years ago in a drastically different context, but also uses his one example to devalue an entire method of studying cultures! Even if Dr. Field's results do turn out to be incorrect, without any information of the success rate of observation-centred versus interview-centered methods, no approach can be deemed superior.

The argument thus presented contains a number of flaws and is based on several unwarranted assumptions. If the author can provide conclusive evidence, preferably in the form of statistics

and premises of his study and the approaches he wishes to compare, it could be possible to fully evaluate the validity of his conclusions.

Some people believe that the most important qualities of an effective teacher are understanding and empathy. Others believe that it is more important for teachers to be rigorous and demanding in their expectations for students.

Write a response in which you discuss which view more closely aligns with your own position and explain your reasoning for the position you take. In developing and supporting your position, you should address both of the views presented.

The role that teachers play in a student's life can perhaps never be fully put into words- they are the guiding light, the voice of reason and the constant source of support. According to the given prompt, some are of the opinion that empathy and compassion are more important qualities in a teacher than a strict and exacting demeanour. I mostly agree with this take, although I do acknowledge that sometimes it is important for teachers to be hard on their students.

Students nowadays are constantly under a lot of stress and pressure due to the ever-increasing cut-throat competition. In such a case, they need every source of encouragement and support they can get, especially from teachers. For instance, the recent pandemic affected the education of students all around the world. Many students lost their near and dear ones, and what they required was for their teachers to be kind and empathetic to their loss, instead of demanding that their assignments be submitted right on time. If anything, recent events have shown us that now, more than ever, is a necessity for compassion and understanding, and it is imperative that teachers be more understanding of the problems faced by their students.

Secondly, childhood is a very impressionable phase of our lives, and teachers play a pivotal role in shaping young minds. Apart from edifying these minds intellectually, is it also not the responsibility of teachers to imbibe them with good morals and values? A scrupulous and honest individual is more important than a genius one, and the best way to ensure our students grow into good human beings is by setting an example. History is a testament to the fact that a stringent and demanding regime does not always churn out people with probity. Hitler was, by all means, an erudite individual, but his strict schooling did nothing to help him develop a kind and compassionate personality. It is thus extremely important for teachers to exhibit these values so that they can impart the same to their students and nurture them morally.

I do however agree that a teacher must also instil a sense of discipline and order in their students' lives. There are times when students must burn the midnight oil and take the tough route so as to make something of themselves. It would be only fair for teachers to, say, demand a good result when they know a student has potential, and take a more rigorous approach to help them achieve all that they aim for. If the demands placed on a student are not too

burdensome, then it is understandable that teachers occasionally have to be tough with them for their own benefit.

With great power comes great responsibility, and the responsibility of teachers is so immense that there can be no one right answer to what constitutes a good teacher. Empathy and understanding can go a long way in holistic development, and an occasional strict approach can help them stay on track.