

Navigating Talent Requirements in Frontier Tech

*by Vanessa Damoulis,
Chase Harrison and Ilan Ramras*



Frontier technologies like quantum computing and artificial intelligence (AI) are revolutionizing multiple functions and industries and consequently creating a slew of new opportunities. As companies embrace these technologies, they are faced with the challenge of [finding the right talent to drive their innovation](#) and growth. In this article, we explore the talent requirements in the frontier tech space and share our observations based on direct client work in the space.



Quantum operates in the space between zeroes and ones.

Understanding the Intersection of Quantum and AI

Quantum computing and AI are often grouped together under the umbrella term of 'frontier tech' or 'deep tech'. While they have distinct characteristics, they are both building on existing capabilities and pushing them to new levels, while also working together in interesting ways to foster effective innovation (e.g., quantum hardware can enhance AI by enabling faster processing and better performance). The unique capabilities of quantum computing, which operates in the "space between ones and zeros", can significantly accelerate AI's learning, development, and self-correction.

Differentiating Academic and Practical Experience

In the world of "frontier tech" talent, the distinctions between academic and applied research become increasingly salient. Academics thrive in the realm of thought-provoking and cutting-edge ideas, while staying primarily in the theoretical domain. Academic success relies on being at the forefront of innovation, often being the first to create new knowledge or explore a new territory without boundaries such as practicality and accessibility. On the other hand, applied research and development is principally concerned with creating tangible products that are usable and generate business value (e.g., through revenue). Companies absolutely require talent that can bridge the gap between academia and industry, possessing both deep technical knowledge and the ability to commercialize innovative ideas.



You can study a problem forever. In this field, a bias toward action... and even a bias toward failure can be really differentiating.

The Desired Qualities of Frontier Tech Talent

When it comes to hiring talent in the frontier tech space, there are several attractive qualities that our clients look for in candidates. Intellectual curiosity is highly valued, as it indicates a willingness to learn and adapt in a rapidly evolving field (in other words, it's not possible to know everything, so a learning mindset is critical). The ability and desire to create and drive revenue-generating products is also crucial, as is the ability to think like an end-user. Candidates with a track record of developing groundbreaking technologies and successfully commercializing them naturally stand out from the competition. Additionally, a bias towards action, entrepreneurial spirit, and adaptability are and should continue to be highly sought traits.

As hiring managers often focus on technical hard skills and direct experience, they may overlook essential leadership competencies or other "soft skills"/traits. In frontier tech, technical knowledge alone is not sufficient. Considering other qualities to balance the technical prowess is key to success in this rapidly evolving field

The Future of Talent Requirements in Frontier Tech

Looking ahead, we have no doubt that the talent requirements in the frontier tech space will continue to evolve. There very well could be a rise in specialization as the field matures and knowledge becomes more commoditized. Different profiles will also emerge, ranging from technical experts to entrepreneurial strategists to research-focused individuals. The popularity of AI and quantum technologies is likely to attract a larger pool of candidates, making it crucial for hiring managers to differentiate between true experts and those who are merely "jumping aboard the bandwagon" as opposed to diving deeper into the literature. As the industry grows, the ability to assess and identify the right talent will become even more critical, and Kingsley Gate has the right industry experience to navigate the shifting tides.

As companies continue to embrace frontier tech as a part of the way they do business, the demand for skilled professionals in the frontier tech space will only increase. Navigating the talent requirements in this rapidly evolving field requires a combination of technical expertise, leadership competencies, and a deep understanding of the industry's dynamics. By staying ahead of the trends and identifying the true experts, executive search professionals can play a vital role in connecting companies with the talent they need to drive innovation and shape the future of frontier tech.

Learn more about our solutions. Talk to one of our experts today!



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