

MOMUN 2026

S I M U L A T I O N T H E O R Y

The Dawn of a New Humanity

Directed by Ben Krakauer

Character Guide

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Companies

Jensen Huang

Jensen Huang is the CEO of Nvidia, one of the largest tech companies in the world, best known for its production of Graphics Processing Units and AI systems. Born in Taiwan in 1963, Huang earned his Master's degree in electrical engineering from Stanford University¹, and later founded Nvidia from a Denny's restaurant at 30. Before founding Nvidia, he designed microchips in AMD, skills he later used for Nvidia, which he built into one of the largest companies in the world throughout the mid 2020s.² In the 2026 AI Bubble Burst, Nvidia took an immense hit, losing 80% of its market capitalization, which alone wiped nearly \$4 trillion off the US stock market. Over the next decade, Huang was able to rebuild the company with less reliance on AI, but neither his nor the company's value has returned to pre-bubble levels.



Huang is still incredibly wealthy, worth around \$120 billion USD for his ownership of roughly 4% of the now \$3 trillion company, and this position alone gives him incredible sway in the AI and tech market. Nvidia stands to profit immensely from simulations, but only if it can successfully rally for the allowance of simulations and the use of its technology to help run them. However, Huang must act carefully, as if simulations become mainstream, or computing continues to drift more to quantum computing, Nvidia's entire market could shrink, ruining the shaken company.

¹"Jensen Huang." n.d. NVIDIA Newsroom. <https://nvidianews.nvidia.com/bios/jensen-huang>.

²"Jensen Huang." 2026. Wikipedia. April 10, 2026. https://en.wikipedia.org/wiki/Jensen_Huang.

Satya Nadella

Satya Nadella is the CEO of Microsoft, another incredibly large company, with a market capitalization of over \$5 trillion. Microsoft produces an incredible range of technology, computer software and hardware, electronics, internet technology and more. Born in 1967, Nadella was appointed as CEO of Microsoft in 2014, serving as the third CEO of Microsoft.³ Before the AI bubble crash, Microsoft had invested significantly in AI. When the crash occurred, it sent ripples through the company, from which it has still not fully recovered. This position has now only been worsened by the tech slump. As CEO and the top shareholder in the company, Nadella is worth around \$2 billion. His wealth and his top position in such an important company gives him a lot of sway in the affairs of the tech industry.



Microsoft stands to earn hugely from simulations, and it is Nadella's goal to get as much of this profit as possible for Microsoft. Microsoft has historically done much research in quantum computing and quantum algorithms, and has the resources to make even larger quantum computers for faster simulations. Nadella must advocate for looser simulation regulation and potential mass production to suit the aim of Microsoft.

³"Satya Nadella." 2026. Source - Microsoft. February 11, 2026. <https://news.microsoft.com/source/exec/satya-nadella/>.

Sundar Pichai

Sundar Pichai is the CEO of Alphabet, most well-known for its subsidiary Google. Alphabet is the largest company in the world, having around a \$6 trillion market capitalization, with most of its focus on Google and the internet technology that it provides, such as search engines, AI, quantum computing and online advertising. Alphabet is also involved in robotics, pharmaceuticals, drone deliveries, and many other industries through its subsidiaries. Pichai was born in 1972 in Madurai, India, before moving to the US, where he joined Google in 2004. He became CEO of Google in 2015 and then CEO of Alphabet in 2019, serving both positions.⁴ Pichai is worth around \$2.5 billion dollars, and his position as CEO of the world's largest company gives him huge importance in the US tech market.

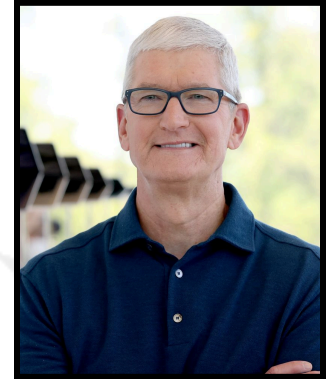


Alphabet has long been involved in quantum computing, and they were the first to declare “quantum supremacy”, creating a quantum computer more powerful than a classical computer. Of the entire private sector, Alphabet has some of the best expertise in this field and stands to profit massively from simulation. If Alphabet can find applications of simulations in the internet technology it is already dominant in, the company can firmly secure its future as a tech leader in the next decades of US technology.

⁴“Sundar Pichai.” 2026. Wikipedia. April 4, 2026. https://en.wikipedia.org/wiki/Sundar_Pichai.

Tim Cook

Tim Cook is the CEO of Apple, one of the most well-known technology companies around the world for its consumer electronics, namely the iPhone and MacBooks, as well as many other technologies and online services. Apple is the second-largest company in the world, worth around \$5.5 trillion. Cook was born in 1960 and has served as the 7th CEO of Apple since 2011, replacing the late Steve Jobs. Cook did his Bachelor's degree in industrial engineering, and later received his MBA.⁵



He is worth around \$3.5 billion, and his role as CEO of Apple makes him the face of consumer electronics, a position that could prove valuable when discussing applications for simulations in the consumer market.

Apple was not hit as hard as many other companies by the AI bubble burst, but its place in Big Tech meant it was still rattled by the crash. Apple was able to recover very quickly, as the majority of its revenue is not tied to AI. The rapid rebound of the company means that Apple is currently one of the healthiest and richest companies, but unlike other tech giants, it has spent much less on research and development. If Apple wishes to play a more pivotal role in the next decades of technology, it must use the cash it has on hand to boost research before it falls too far behind.

⁵“Apple Leadership - Tim Cook.” n.d. Apple. <https://www.apple.com/ca/leadership/tim-cook/>.

Mark Zuckerberg

Mark Zuckerberg is the CEO of Meta, a company most well-known for its online platforms like WhatsApp, Facebook, Instagram, Messenger and more. Meta makes around 97% of its revenue from advertising, and is currently worth around \$2.5 trillion. Zuckerberg co-founded Facebook in 2004 and has served as CEO since then.⁶ Over his three decades of leadership, Meta has performed exceptionally well, becoming one of the most well-known technology companies, and Zuckerberg is now worth around \$260 billion. Over its history, Meta has pursued many ventures, such as the Metaverse, which was one of the first attempts to make a simulation; however, it proved unsuccessful. Meta has also invested heavily in AI data centres, which could prove very useful in making and using simulations.



Meta sits in a very different situation from many of the other companies present in this committee. Its stake in simulations is not from any physical product they sell, but rather in how simulations could change advertising and how Meta can profit from that. It could be possible to test advertisements in simulations or use Meta's online platforms to advertise simulations themselves. Whatever Meta and Zuckerberg choose to do, their money and their resources will prove to be significant in both advertising and big data as a whole.

⁶“Mark Zuckerberg.” 2026. Wikipedia. April 11, 2026. https://en.wikipedia.org/wiki/Mark_Zuckerberg.

Hrant Gharibyan

Hrant Gharibyan is the Co-founder and CEO of BlueQubit, a company that has exploded in recent years and has become the leader in quantum algorithms in the US. Gharibyan is a theoretical physicist who earned his PhD from Stanford, specializing in quantum information and black hole physics.⁷ Gharibyan co-founded BlueQubit in 2022, with the stated goal to “democratize” quantum computing, by creating online software that allows anyone to create their own quantum computing code.⁸ As quantum computing gained popularity and use through the late 2020s, Gharibyan was able to build BlueQubit into a very significant player in quantum computing. BlueQubit went public in 2028 and is currently worth around \$50 billion, with Gharibyan being worth around \$1.5 billion.



BlueQubit, although smaller than many other companies in the committee, has expertise that will make the company key to developing simulations. Gharibyan’s experience with quantum algorithms will allow for the optimization and strengthening of simulations and the many potential leaps that can be made. Gharibyan has already successfully grown BlueQubit into a major company, but with the right actions, he can make the company one of the most important tech companies in the world.

⁷“hG.” n.d. <https://www.hrantgharibyan.com/>.

⁸“BlueQubit.” n.d. <https://www.bluequbit.io/blog-author/hrant-gharibyan>.

Arvind Krishna

Arvind Krishna is the CEO of IBM, a massive industrial research company and producer of many computer components and software. Krishna was born in 1962 in India, where he received a Bachelor of Technology in electrical engineering in 1985. In 1991, he received a PhD in electrical engineering from the University of Illinois Urbana-Champaign. Krishna joined IBM as a researcher in 1990 and became CEO in 2020.⁹ Through his 45-year career at IBM, Krishna has made huge achievements and has helped bring IBM to one of the top companies in quantum computing into the 2030s. IBM first announced a commercial quantum computer in 2019, and since then has become one of the largest producers of this technology. IBM owns quantum computing centres across the world, which gives it a significant stake in simulations. IBM also produces microprocessors, computers for data centres, and more technological infrastructure.

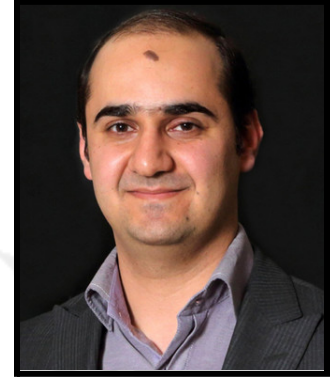


Of all the companies in this committee, IBM has the most potential to use simulation research, as the infrastructure for this capacity has already been built by them. IBM is also heavily invested in AI, but has been suffering as a result of the Tech Slump. As a company mostly dedicated to research, the lack of significant technology breakthroughs has been more disastrous for them than for many other companies. If Krishna wishes to rescue his company from the Tech Slump, simulations may be the necessary push that ends the crisis and brings IBM into the next age of technology.

⁹“IBM - Arvind Krishna - Chief Executive Officer.” n.d. <https://www.ibm.com/about/arvind>.

Alireza Najafi-Yazdi

Alireza Najafi-Yazdi is the founder and CEO of the quantum computing company Anyon Systems. Najafi-Yazdi earned his PhD from McGill University in Mechanical Engineering, where he later became a professor and research fellow. Najafi-Yazdi founded Anyon Systems in 2014,¹⁰ and over the past two decades has become the leading quantum computing company in Canada, and a significant player on the world stage. As quantum computing grew as an industry in the late 20s, Najafi-Yazdi was able to take advantage of this by taking his company public. Anyon Systems is now worth around \$150 billion, being one of the largest companies in Canada. Najafi-Yazdi has also researched nuclear fusion, and Anyon Systems has a stake in this technology as a potential power source for their computers.



Anyon Systems is one of the few Canadian companies represented in this committee, which means Najafi-Yazdi speaks for Canadian quantum computing. Najafi-Yazdi must make sure that actions taken around simulations are not US-focused, or his company and his country risk being alienated. If Najafi-Yazdi is successful, he may be able to usher in a new era of cooperation between American and Canadian companies in quantum computing and simulations.

¹⁰Canadian International Council. 2024. "Alireza Najafi-Yazdi - Canadian International Council." January 8, 2024. <https://thecic.org/board-of-directors/alireza-najafi-yazdi/>.

Niccolo de Masi

Niccolo de Masi is the CEO of American quantum computing company IonQ, a company that specializes in trapped ion quantum computers (TIQC). De Masi received both his bachelor's and master's degrees in physics from Cambridge University, where he specialized in quantum mechanics and electron-beam lithography. Over his career, de Masi has served on the boards of over 14 public companies before arriving at IonQ. de Masi was on IonQ's board of directors starting in 2021 and led IonQ's listing as a public company. In 2025 was appointed as CEO¹¹, and since then has pushed IonQ to become a huge player in quantum computing. During de Masi's tenure, IonQ has bought many companies and made global partnerships, further raising its prominence as a company. IonQ is the world's largest producer of TIQCs and is also a large developer of accompanying software.



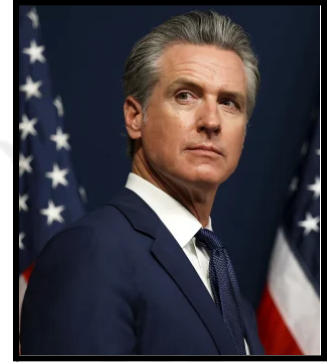
IonQ could make incredible profits from simulations, considering it produces a large percentage of the quantum computers currently used. If general-purpose and widespread use of simulations is to be adopted, IonQ will need to play a key role, as it is one of the few companies that can actually mass-produce the quantum computers needed to run simulations. If de Masi can push for the adoption of quantum computers in the global market, IonQ may become one of the most important companies in the next decades of US technology.

¹¹"Niccolo de Masi." n.d. IonQ. <https://investors.ionq.com/governance/board-of-directors/person-details/>.

Politicians

Gavin Newsom

Gavin Newsom is the current US president, having served since 2028 after Donald Trump's Second term. Gavin Newsom was born in 1967 in San Francisco, and over the course of a 40-year political career, starting in 1995, he would work his way up to POTUS. Initially on the San Francisco Board of Supervisors, he then became mayor of San Francisco. From there, he became the Lieutenant Governor of California and in 2018 was elected as Governor of California.¹² His time as Governor was when Newsom cemented his reputation, allowing him to win the Democratic candidacy for the 2028 election. Over the 7 years Newsom has been in power, the US has had many successes and failures. Many of the crises of the 20s have been dealt with, but now Newsom and his government face the issue of the tech slump, and of course, now simulations. Many of Newsom's political positions include human and labour rights protection, protecting the environment, and careful allocation of funds. If simulations can help in achieving these goals, Newsom should take the opportunity.



As President, Newsom has a lot of significance in how simulations will be treated, but the final call will still be up to Congress. Newsom has a responsibility to the people of America, to make sure the country is successful, especially as simulations pose to rock the boat of the modern US. Newsom's term is coming to an end, meaning that he must prepare the Democratic party for the next era of US politics, whether that means finding a new leader or simply going out as a successful leader. Newsom must tread carefully, or he risks ruining the Democrats' chances of winning the upcoming 2036 election.

¹²"Gavin Newsom." 2026. Wikipedia. April 10, 2026. https://en.wikipedia.org/wiki/Gavin_Newsom.

Andrew Yang

Andrew Yang is the first Secretary of the Department of Technology, being appointed this role after Gavin Newsom established the department to combat the Tech Slump. Yang first proposed the Department of Technology in 2019 while running for Democratic Candidate in the 2020 election, but he was not successful.¹³ He founded the Forward Party in 2021 and had only mild successes until 2031, when he was brought back into the Democratic Party by Gavin Newsom. Since then, he has worked towards revitalizing American technology and recovering from the Tech Slump. He has made progress in allowing more funds to public technology and improving research grants for startups and private companies, but so far, progress towards breaking the Slump has been slow.



Yang's business and technology expertise allow him to play an important role in the future of simulations in the US. If simulations become a mainstream technology, it will be up to the Department of Technology to help manage these and use simulations to make scientific advancements. Although new to the Democratic Party, he still must work to ensure its success in the next year, leading up to the 2036 election, and will hopefully help bring the Tech Slump to an end.

¹³"Andrew Yang." 2026. Wikipedia. March 25, 2026. https://en.wikipedia.org/wiki/Andrew_Yang.

Brad Cooper

Brad Cooper is the Secretary of Defence of the United States, serving since 2031 after rising through the US Navy ranks, being selected as Secretary of Defence from his position as Fleet Admiral of the US Navy and has been in the Navy since 1989. Born in 1967 in North Carolina, he is an incredibly decorated serviceman, earning 40+ awards over his career. He has served across the world, in the Middle East, South America, the Balkans and Korea. In the mid to late-2020s, Cooper was a key naval leader in the Middle East Crisis, which is where he became well-reputed in the US Navy, and this success led him to the position of Secretary of Defence.¹⁴



Although Cooper lacks significant political experience, his military knowledge is key to giving the government the understanding it needs for how simulations could be used for advancing the military. His position is conditional on the success of the current Democratic government, but he has much less to lose than some of the other Department Secretaries, as no matter which party is next elected, his term will likely come to an end, considering his 4-years of service in the role. However, he is still loyal to the military and should do everything in his power to ensure its success in the coming months, years, or even decades.

¹⁴“Commander, Admiral Brad Cooper.” n.d. U.S. Central Command.
<https://www.centcom.mil/ABOUT-US/LEADERSHIP/Bio-Article-View/Article/4269737/commander-admiral-brad-cooper/>.

Fiona Ma

Fiona Ma is the Secretary of Commerce in the US, serving since 2027 when she was appointed by Gavin Newsom from her position as Governor of California. Born in 1966, Fiona Ma's political career began on the San Francisco Board of Supervisors, where she and Gavin Newsom served during the same time between 2002 and 2004. Fiona Ma rose through the ranks of the California legislature, eventually becoming the 34th Treasurer of California in 2019.¹⁵ She has served as Secretary of Commerce for the entirety of Newsom's Democratic government. Through her tenure, she has advocated for stronger environmental action, supported small businesses, and worked to bring down housing prices across the country.



Fiona Ma may be able to use simulations to advance her political goals with the time in government she has left. If regulations on simulations are set up correctly now, it could safeguard the US's future. As Secretary of Commerce, Fiona Ma and her department are responsible for industrial standards and protecting economic security. Whichever direction the committee goes with regard to simulations, Fiona Ma must make sure she meets her responsibilities to the Department of Commerce.

¹⁵"Fiona Ma." 2026. Wikipedia. April 3, 2026. https://en.wikipedia.org/wiki/Fiona_Ma.

Daniel Lurie

Daniel Lurie is the Governor of California, serving since 2031 after being elected as a member of the Democratic Party. Born in 1977, Lurie is a fairly wealthy philanthropist and politician, inheriting much of his wealth as a descendant of businessman Levi Strauss. Lurie earned his Master's of Public Policy from the University of California, Berkeley, before founding the non-profit organization "Tipping Point Community" that fights poverty in California. Lurie's political career began when he was elected as the 46th Mayor of San Francisco in 2025.¹⁶



From there, he continued to rise through California politics until being elected as Governor of California. Lurie's main policies include building homes, public safety, and improving the efficiency of where the State's money is spent.

The affairs of this committee are centred mostly in California. The current most powerful quantum computer, both Lawrence Berkeley and Lawrence Livermore National Laboratories, and Silicon Valley, are all located in California. This means that California and any state-level regulations are bound to have immense effects on the use of simulations. If Lurie wants what is best for his state, he must find a use of simulations that will aid the issues facing California, and could even try to keep the technology centred in the state if he so chooses.

¹⁶"Daniel Lurie | SF.gov." n.d. <https://www.sf.gov/profile--daniel-lurie>.

**Note that the time of election for representatives is much earlier than 2035. Representatives for the three congressional districts represented are the same as they currently are for ease of research*

Lateefah Simon

Lateefah Simon is the representative for the 12th Congressional District of California, first being elected in 2025. Simon was born in 1977 in San Francisco and earned a Master's of Public Administration from the University of San Francisco. She served in multiple positions before running as a congressional member, including on the Bay Area Rapid Transport Board of Directors and on the Board of Trustees for the California State University System. Simon is positioned with the progressive wing of the Democratic caucus, supporting stronger health care, environmentalism and a strong supporter of the LGBTQ community.¹⁷



The 12th Congressional District is located along the coast of the eastern side of the San Francisco Bay Area, and is just north of Silicon Valley. Most notably, this district contains the Lawrence Berkeley National Laboratory, the location of the sole quantum computer that can currently run simulations. Simon's district is central to the issues of this committee, and she must act to ensure the use of simulations is beneficial to her and her political views. If Simon can find a way to use simulations in a way that can benefit people in need, she should push for that. But if it seems that simulations will negatively affect the people, she may need to speak against their use.

¹⁷"Lateefah Simon." 2026. Wikipedia. March 27, 2026. https://en.wikipedia.org/wiki/Lateefah_Simon.

Sam Liccardo

Sam Liccardo is an attorney and politician who is the current representative for the 16th Congressional District of California, serving since 2025. Liccardo was born in 1970 and earned a Master of Public Policy from Harvard Law School. Liccardo's political career began in 2006 when he ran to serve on the San Jose City Council, where he served for 7 years. In 2014, Liccardo was elected as mayor of San Jose, serving until his term expired in 2023. Through his career, Liccardo has pushed for more transportation alternatives, increasing housing, especially with increased density, and renewable energy. Liccardo is part of a number of caucuses, namely the New Democratic Coalition, which could be described as a centrist, pro-business part of the Democratic Party. Liccardo's overall political views can be seen as centrist and fiscally responsible.¹⁸



The 16th Congressional District is a large area stretching from the Pacific coast to southern San Jose and encompasses a fairly large portion of Silicon Valley. With the advancement of simulations, Silicon Valley is bound to become an important centre for this technology, but is currently performing poorly as a result of the Tech Slump. Liccardo's pro-business views are likely to push him towards supporting simulations as a source of income for the US and California, but he must do so responsibly in a way that the people he represents will appreciate.

¹⁸"Sam Liccardo." 2026. Wikipedia. March 24, 2026. https://en.wikipedia.org/wiki/Sam_Liccardo.

Ro Khanna

Ro Khanna is a politician and attorney serving as the representative for the 17th Congressional District of California since 2017. Khanna was born in 1976 and received a Bachelor of Arts in economics from the University of Chicago in 1998. He then later received a Juris Doctor from Yale Law School in 2001. Khanna has been involved in politics, and specifically the Democratic Party, since 1996, when he supported Obama in his campaign for Illinois Senate. In 2009, Khanna was appointed by Obama as Deputy Assistant Secretary of the US Department of Commerce. Khanna takes a progressive stance on many issues, such as economic policy and LGBTQ rights. Khanna supports unionization, tuition-free college, and raising the minimum wage. He is a member of the Congressional Progressive Caucus and is involved in multiple technology-based assignments.¹⁹



The 17th Congressional District contains the majority of Silicon Valley, including prominent locations such as Apple Park and many other tech company headquarters. Many of the companies located in his district are companies that are bound to demand the use of simulations, which will apply significant pressure to Khanna's decisions. His political views do not generally impact ideals over simulations, except that Khanna should make sure that simulation use is not exclusive to large companies, and does not become an elitist technology.

¹⁹"Ro Khanna." 2026. Wikipedia. April 7, 2026. https://en.wikipedia.org/wiki/Ro_Khanna.

Scientists

Geoffrey Hinton

Geoffrey Hinton is one of the most prominent figures in AI, earning the title “The Godfather of AI”. He was born in 1947 in the UK, earning his PhD in Artificial Intelligence from the University of Edinburgh in 1978. Hinton has worked at many universities as a professor, most recently as a professor at the University of Toronto since 1987. He is currently University Professor Emeritus at UofT, a symbolic title for past professors. In 2012, Hinton co-founded DNNresearch, which was bought by Google in 2013.²⁰ In 2023, he left Google over concerns of growing use of AI, specifically Artificial General Intelligence, which is when AI surpasses human intelligence. Some of the other risks he has warned of include the use of AI by bad actors and economic impacts such as job losses. Currently, Hinton is the Chief Scientific Advisor at the research institute Vector, which is a company researching AI to strengthen economic growth. His position in this company allows him to perform research, as long as it aligns with Vector’s goals.



Many of Hinton’s concerns over AI can be translated to simulations. Simulations need AI to create simulated life. The life that we simulate may turn out to be more intelligent than we are, creating AGI, which could be disastrous. As well as this, the concern of bad actors in AI can be seen again in simulations. Many people, companies or governments could abuse the power of simulations, which will be a very significant issue if simulations become a mainstream technology. Overall, Hinton must make sure that, however simulations are treated, humanity will be placed first.

²⁰“Geoffrey Hinton.” n.d. <https://www.cs.toronto.edu/~hinton/>.

Jeff Dean

Jeff Dean is a prominent software engineer and computer scientist and is currently the chief scientist of Google. Dean was born in 1968 in Hawaii, before moving to Minneapolis and earning a Bachelor's Degree in computer science in 1990. In 1996, Dean received a PhD in computer science from the University of Washington and joined Google in 1999 as the company's 30th employee, even earlier than current Alphabet CEO Sundar Pichai. Dean, along with Sanjay Ghemawat, is considered one of the most important people behind making Google as big as it is today. They designed many programs and services that were huge for Google, such as Bigtable and Spanner.²¹ Although Dean works under Sundar Pichai, he nonetheless holds a lot of independence for research ventures he wishes to pursue. His seniority in the company means he has a lot of freedom, but also a significant responsibility for Google's research prosperity. Dean, although a CEO, fits in more with the scientific community, as his main role is scientific research for Google.

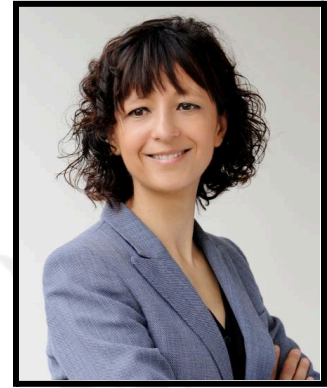


Dean's views on AI and simulations are effectively the opposite of those of many other scientists. Dean has a long history of research into AI, and now in AI's applications in simulations. Dean must fight for greater use of simulations and make sure Google and DeepMind can become a pioneer of simulation technology if he wishes for himself and his company to be successful. Dean, however, must also maintain relationships with the scientific community, or he risks being alienated from this community, and thus slowing the progress he can make.

²¹"Jeff Dean." 2026. Wikipedia. March 1, 2026. https://en.wikipedia.org/wiki/Jeff_Dean.

Emmanuelle Charpentier

Emmanuelle Charpentier is a French researcher and professor in microbiology and biochemistry. Charpentier was born in 1968 and studied biochemistry and genetics in university, eventually earning her PhD from the Pasteur Institute, investigating molecular mechanisms for antibiotic resistance. Charpentier is best known for her work with CRISPR, most notably using it as a tool for genome editing, for which she and her colleague Jennifer Doudna won the Nobel Prize in Chemistry. Currently, she is the director of the Max Planck Unit for the Science of Pathogens, an institute part of the Max Planck Society.²² The Max Planck Society is a group of research institutes located in Germany, with which Charpentier's association gives her connections to many well-renowned scientists.²³



Charpentier does not have expertise in quantum physics, simulations or AI, unlike many of the other members of this committee. This gives her an important role as the representative of the rest of the scientific community. Charpentier should try to direct the committee in such a way that will benefit scientific advancement and human well-being. She may also be able to use simulations for her own research in the Max Planck Society. It could be possible to simulate diseases, vaccines and other disease control methods within a simulation, which could provide invaluable scientific information.

²²“Emmanuelle Charpentier.” n.d. About Emmanuelle. <https://www.emmanuelle-charpentier.org/>.

²³“Profile and Vision.” n.d. <https://www.mpg.de/11761628/profile-visions>.

Shohini Ghose

Shohini Ghose is a quantum physicist and professor of physics and computer science at Wilfred Laurier University. Ghose was born in India, and went to Miami University for her university, where she majored in physics and mathematics. In 2003, she received a PhD in physics from the University of New Mexico. After her PhD, Ghose first worked at the University of Calgary for 2 years before moving to Wilfred Laurier University. She has been a prominent researcher, particularly in quantum chaos, and has also done research into quantum computing.²⁴



She is currently serving as the director of the Quantum Advancement Research Centre (QuARC), a prominent lab at Carlton University, which performs cutting-edge quantum research.

Ghose's immense knowledge of quantum physics and position in one of the most advanced labs for quantum computing in the world make her important to the results of this committee. She, along with Geoffrey Hinton are the two Canadian scientists present in this committee, meaning she represents the research facilities of Canada, and should fight for North American cooperation in the use of simulations. If Ghose can get simulations in her lab, she can make many significant achievements and push Canadian technology forward, breaking the Tech Slump.

²⁴"Shohini Ghose." 2026. Wikipedia. February 27, 2026. https://en.wikipedia.org/wiki/Shohini_Ghose.

Scott Aaronson

Scott Aaronson is a theoretical computer scientist and is the current director of the Lawrence Berkeley National Laboratory (LBNL). Aaronson was born in 1981, growing up mostly in the US but spending a year in Hong Kong. Aaronson received a Bachelor of Science in computer science in 2000 at Cornell University, and then went to the University of California, Berkeley for his PhD, which he received in 2004. From 2007 to 2016, Aaronson worked at MIT, researching quantum computing, before eventually moving to the University of Texas at Austin. Aaronson has won numerous awards for his work in quantum computing.²⁵ His work and prominence led him to be chosen as the director of the LBNL, one of the most prestigious and well-known labs in the world, as well as one of the most advanced for research in many technologies, such as quantum computing. This lab is also where the newly created simulation was made.



The LBNL is incredibly important to this committee, as it is the only place in the world that has designed a simulation so complex. Aaronson directly supervised the creation of this simulation, and now, through his position, controls it until government action is taken. This lab is already one of the best labs in the world, but through this achievement, it is poised to become even more than that. Aaronson has many possibilities for what he can do with the creation of this technology, but he should be careful, as his actions will be watched very closely by both the government and the rest of this committee.

²⁵"Scott Aaronson." 2026. Wikipedia. February 20, 2026. https://en.wikipedia.org/wiki/Scott_Aaronson.

Adam Riess

Adam Riess is a distinguished astrophysicist and current director of the Lawrence Livermore National Laboratory (LLNL). Born in 1969, Riess received his Bachelor's of Physics from the Massachusetts Institute of Technology in 1992, and his PhD from Harvard in 1996. His research involved studying supernovae and pulsating stars, as well as the causes for cosmic acceleration. Before being appointed as the director of the LLNL in 2031, Riess worked as a professor at Johns Hopkins University. His contributions to science have merited Riess many awards and accolades, including the Nobel Prize in Physics, which he won along with Saul Perlmutter and Brian P. Schmidt, for the discovery of the acceleration and expansion of the universe.²⁶ As director of the LLNL, Riess holds a lot of power over one of the most powerful labs in the world. The LLNL does not focus on the same areas of research as the similarly named LBNL does. While the LBNL is mostly involved in unclassified fundamental research, the LLNL is involved primarily in national security, nuclear defence, and other high-security projects, but is also involved in many other smaller projects.



Riess's role as director of the LLNL makes him very important to the committee and to the US government. The LLNL is responsible for a fair portion of the US's top military research, meaning that Riess has the responsibility for the military implications of simulations. Riess's lab, along with the LBNL, is also the only lab to possess the quantum algorithms needed to run simulations, although other labs and companies are not far behind. Riess and the LLNL must be ready to support the US government in simulation research, or the US risks its military falling behind in the wake of this new technology.

²⁶“Adam Riess.” 2026. Wikipedia. March 31, 2026. https://en.wikipedia.org/wiki/Adam_Riess.

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