A Conversation With American Author, Speaker and Rocket Scientist,

Olympia LePoint

Olympia LePoint is an award-winning NASA rocket scientist, author, TED Talk speaker, and journalist. Most recently, Olympia created a human decision-making scientific theory called Quantum Deciding, revealing the secret science to achieve your best future.

Q: What inspired you to pursue a career in science and technology?

OL: I believe science and technology are powerful tools that give answers to life's most pressing situations. As a result, I built my AnswersUnleashed.com platform around finding answers, and it is based on my personal story of where science and faith meet.

At the age of 6, I went to the Jet Propulsion Laboratory where I saw rocket engines, and I told myself that I would be a rocket scientist. I did not know the challenges I would face as a woman of color entering the field with men. I did not know the challenges I would face in educating myself for this mission.

I am a scientist who prays to God for answers. Everyone handles life differently; prayer shows me how science can answer problems and the methods to use science and technology ethically to help people in life-changing ways. I know that may sound strange to some. For my friends and supporters, they know it is my gift. I turn to God for answers, and the solutions that come are in the forms of math and science. With this approach, and after a tough ordeal growing up, I helped build a career which started with rockets and continued with books and live lectures. I helped build innovative NASA engineering and technology solutions that we have successfully flown to space in 28 NASA Space Shuttle Missions. I have also created a science educational book series, Answers Unleashed. Through challenges, I witness that God shows people like me how to improve lives using STEM (science, technology, engineering, and math).

This philosophy started in my youth. While I was growing up, I literally struggled to stay alive. I speak about my experience in my TEDx talk, "Reprogramming Your Brain to Overcome Fear," and in my episode on the TV show "Impact Theory."

I was raised in South Central Los Angeles in the 1980s in the middle of gang violence and the crack cocaine epidemic. Next door to my childhood home was a crack house, and I would see drug addicts light up their drugs out of my bedroom window. I knew what I was seeing was mentally sick, and I knew that I needed to heal myself from what I was seeing. I prayed to God for help: To help my mom, to help me, and to help people realize they had a choice and could turn to a better future.

My prayers gave me the answers to change my thinking, pursue an education, and generate a better future for myself.

Math and theater were the two subjects I loved most in school. Math was the career choice where I would be able to eventually pursue my dream of being a rocket scientist. After failing algebra, geometry, calculus, and chemistry, I received help from a teacher. With encouragement, I decided to pursue a university degree in mathematics.

Under Affirmative Action, I entered California State University Northridge, where I worked hard to compete with the other male students as a math major. At my university in the early 1990s, I remember being the only young woman in my math classes. I was determined to be the top performer. I told myself that I would be a woman to break barriers in STEM for the rest of my life. I was later one of the top five students in a 6,500 graduating class with the Karen, Leo, and Rita Saulter Memorial Award.

For me, math and science were the answers that God provided to me. Later, while writing my second book, I discovered that learning math and science helped rewire, reconnect, and reprogram my brain's frontal lobes.

While at California State University Northridge, I studied under award-winning math professors Dr. Mark Schilling and Dr. Michael Neubauer. Dr. Magnheld Lien also helped

me enter graduate school in mathematics, where I earned a master's degree in applied mathematics. I also became a Notable Alumni and won the 2003 National Engineer of the Year "Modern Day Technology Leader" Award.

Since then, I have won several awards. I won the 2023 Top 100 Women of the Future "Emerging Technology Leader" Award, the 2023 Los Angeles Times Festival of Books IRWIN Award "Most Influential Science Book Series," the 2017 Rotary International Business Executive Leadership Award "Paul Harris Fellow," and the 2003 National Engineer of the Year "Modern Day Technology Leader" Award.

By studying STEM, I was able to educate myself and change my future. The logic I learned helped me rewire my brain to overcome my fears. It still helps me reprogram my mind today. As a result, I help others do the same in my Answers Unleashed book series. I help K-12 Students, college students, and STEM professionals find answers in their everyday experiences.

I choose to walk in my calling. We each have a calling in our lives. My calling is to show how science can answer life's toughest situations. Used ethically, science and technology give hope and life to humanity.

Q: Why is it important for people to understand AI?

OP: If you use AI correctly, it's super powerful, but AI wholly depends on the information fed to it. Artificial intelligence is helpful when it is humanitarian based, and I believe people must use AI in ethical ways, so as to prevent harm and dangerous results. Artificial intelligence is simply a tool to help people find patterns quickly, but not all AI operates the same. Some AI helps people, and other types take people's data and identities. In the wrong hands, AI can take your identity and give false information. If there are companies that are not legitimate, be aware.

As a history to AI, I will give a background. There have been three major types of artificial intelligence seen thus far.

Traditional AI. This is used for fraud detection, medical diagnosis, and to prevent terrorist communication and attacks.

Predictive AI are used to forecast outcomes based on historical data patterns and existing information. This is used in the way we forecast the weather in the stock market.

Generative AI is the new AI in the news. It takes a different approach, focusing on cutting from preexisting content to create new content. It uses large datasets, and engineers

create large language models (known as LLMs) using math algorithms to generate new text, images, music, and even videos. These are called deep-fake videos and images.

There were three events that caused the explosion of generative AI. First, in 2019, three scientists—Yoshua Bengio, Geoffrey Hinton, and Yann LeCun—won the Nobel Peace Prize, as well as the 2018 Turing Award for Machine Learning. Second, the COVID-19 pandemic caused people to use video conferencing. All the data had to be processed by computer graphics cards made by technology companies who had tools to analyze all the image, voice, and text data. Graphics cards companies like Nvidia and Intel also make computer chips. After all three events, generative AI technology exploded, and the three types of AI began to merge. However, AI does not always give you the correct results.

To better explain with an example, self-driving cars use reinforced and unsupervised machine learning AI together. When the car AI software calculates, it sees objects and predicts if, for example, a deer is going to run across the street or stay still. It may run across, and your self-driving car may not break. Your safety is dependent on a machine getting the probability right. Not all AI gets the correct answers, which is why we have witnessed deaths on the news within self-driving car accidents.

But the probability game with machine learning is not just limited to self-driving vehicles. It extends into new, generative AI.

Artificial intelligence is only as accurate as the information that goes into LLM, which is the math program it uses to handle the data and give results. Plus, AI is only as good as the programmer's ability to understand the issues of the initial data used to build the LLM that AI uses to give results.

Not all AI gives correct answers, and it can even spread fake information and propaganda by making up data when no data exists. It is called "AI hallucinations" when AI makes up false data to prove its point.

If the information that it starts with is biased, flat, or wrong, it can give results that are plagiarized or outdated. This can lead to lawsuits.

Plus, if the beginning data does not fairly reflect women and people of color or uses false information in facial recognition, AI can be used to falsely imprison people, take identities, steal company proprietary data, and give dangerously wrong results. So, AI can be regulated internationally to ensure this does not happen to people across the world. This is where AI can be dangerous.

There are companies that take your data on purpose, and

there are also companies that safeguard it. We must work with ethical companies, build governing AI agencies, and know how these systems work to produce safe and ethical uses of technology.

The method by which we bridge the gap between today's limited AI results is to include human beings in the ethical process. Humans can check the results and see if and when the AI is accurate—or not.

Q: What would you like people to take away from you and your career?

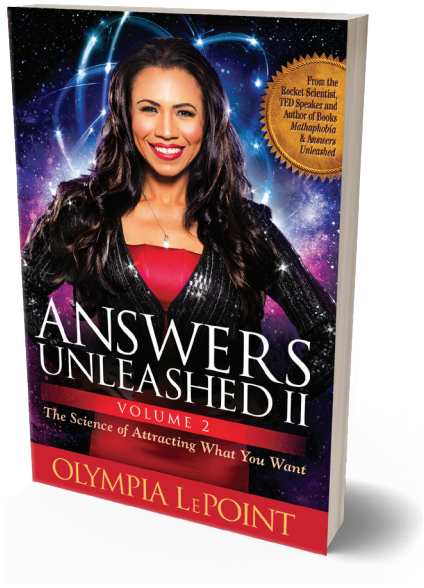
OP: I would like people to take three things away from my career as an author and speaker: First, God has a calling for your life. Second, I would like you to know that you can overcome obstacles. Keep focused on your mission, even if the odds are not in your favor. You will succeed. Third, I'd like you to know how science can be used, so we can have innovators across the world who can save human lives with science and technology for centuries to come.

Q: How was your time working with NASA and what did you learn?

OP: I learned that no one person has all the answers. There are teams of brilliant thinkers who come together to do great things. The most important thing is to find people who have the same values as you.

Q: Tell us why you left your career at Boeing to become a College Professor?

OP: When I was 30 years old, I was in a meeting discussing NASA rocket engine development with fellow scientists. I looked to the left and right. I was the only woman. I was the only person under 30. Everyone in the room was scheduled to retire in 3-5 years. I thought, Who is going to help launch rockets when they retire? Who is going to recruit new scientists to eventually sit in this room? I began to realize the gravity of this situation.



Then, it felt like God was tapping me on the shoulder! I was the person to promote math and science to do great things.

At first, I brushed it off. Then there was a nagging in my conscience to follow through with the mission to inspire people to go into STEM careers and use STEM to find answers.
A few months later, I left.

I started my own STEM educational business and went through financial difficulties as I funded my own products. I still do, but I knew someone had to invest in what I was doing, so I started with myself.

During this time, I went to teach math as a professor at a local community college. There, the retired math chair had me do a series of math lectures and workshops to help people overcome their math fears. The contents from my workshop led me to write my first book, Mathaphobia: How You Can Overcome Your Math Fears and Become a Rocket Scientist.

The book later turned into my TEDx talk, "Reprogramming Your Brain to Overcome Fear." That TEDx talk educated over 1 million people online—and my students are the ones who promoted it online.

That talk led to me sharing space and science information as a guest science expert on TV news programs on ABC, NBC, CBS, and PBS, as well as within People and the Huffington Post, to millions of viewers. Again, the very students I was training to enter medical schools and engineering schools were making my information go viral.
That TEDx talk led to my next book, Answers Unleashed: The Science of Unleashing Your Brain's Power. The content of this talk educated 2 million people online within a study video.
That book led to global technology forum talks that I gave in 2019 to over 6,000 AI professional engineers in the audience at the SAS Global Technology Forum. That experience also led to my latest book, Answers Unleashed II: The Science of Attracting What You Want.

Starting this fall 2023, I am returning to teach at two new campuses as a part-time professor while I continue to build my book-publishing business. The schools are California State University Northridge and Santa Monica College.

I teach as a Research Methods professor at California State University in the Africana Studies Department. There, I teach a research-methods upper-division class. I am also developing statistics classes with a team that investigates national data pertaining to health care data, AI facial recognition data, employment data, and housing data, as well as how it can be fairer and more equitable for women and people of color in government systems.

I also teach as a Political Science and Emerging Technology professor at Santa Monica College in the Emeritus program. My class is open to all members of the public for all ages, and I inform professionals and retired audiences about new emerging technologies, how these technologies are currently being used, and the policies that help keep people safe.

I love helping people learn and use science, technology, engineering, and mathematics.

Q: What steps do you take to ensure the security of the systems and applications you work on?

OP: For my business, I have U.S. trademarked my learning programs Mathaphobia®, Answers Unleashed®, and Quantum Deciding®. In these training courses, I create methods for people to know how to solve problems, innovate, and keep their data secure.

Q: How do you see yourself contributing to the growth and advancement of the technology industry in the future?

OP: I see myself educating people today through live keynote talks and in the future through hologram technology. Currently, my Quantum Deciding training program helps

leaders make effective decisions for the future using science and technology. With issues such as climate change, cyber security, and world health concerns facing the planet, we can together invent solutions for the future by making effective decisions today. Visit: https://www.AnswersUnleashed.com/QuantumDeciding

Q: What is your goal for the future?

OP: With God's favor, I'd like to become a world-renowned scientist, author, speaker, and inventor; for centuries to come, I'd like to be an iconic Nobel Prize-winning figure representing science and humankind making the right decisions with science and technology. I'd like to speak in stadiums in the future with my book series and collective multimedia works. I'd like to become a prosperous philanthropist who can help save lives across the world with education and new, innovative forms of science and technology.

Q: How do you see yourself contributing to the growth and advancement of the technology industry in the future?

OP: I see myself helping people with STEM using hologram technologies. In the next 10 years, society will be dealing with quantum communication. Digital platforms will be updated. We will have quantum internet, which will provide hologram technologies and teleported video communications. I have a mind like Albert Einstein, and I devise ways for people to use science in effective ways.

I see myself being one of the pioneering leaders in hologram technology and helping to build STEM educational platform systems that will reach people around the world with 3D hologram educational platforms.

Q: What would you like people to take away from you and your career?

OP: With God, anything is possible. You can even become a rocket scientist.

Q: Can you share with our audience why you started two educational websites?

OP: I started my first educational website, Mathaphobia.com, where I helped people with math tutoring. The platform was a way to give math education online to people in various areas of the world.

My second educational platform, AnswersUnleashed.com, was developed to help adults embrace innovation by applying their faith in science applications. The Answers Unleashed® platform was first established as a college campus radio show to help people look at science in new ways. The podcast was used to interview guests, so audience members could reshape their brains to find answers to life's most pressing problems. I helped students unleash their brain power and find innovative solutions. My students fell in love with the platform, and

the platform extended itself into producing an award-winning book series, TV shows, and news content. I have worked with amazing news producers and writers from NBC, CBS, ABC, FOX, Buzzfeed, and PBS to produce exciting, accurate, and educational news stories.

My latest platform is on QuantumDeciding.com, (technically on AnswersUnleashed.com/QuantumDeciding). It helps executives, managers, and leading professionals make effective decisions for the future. The system uses keynote talks, my third book, and a yearly planner that I created. The Quantum Deciding® System helps people understand their values and resources, so they can create the future that they want.

Q: Tell us about some of the things you're planning to work on in the future?

OP: I am an author, so I see myself writing books for my entire life. I produce and host educational TV programs. I am thankful to my agent, Babette Perry at Innovative Artists, who works to secure new opportunities with TV hosting. I am working on my upcoming 4th book which will help people mentally get through life's most emotionally dark times, using their faith and the science of light. This is one book that will be amazing. So, I am working on this amazing book now. More details are to come soon.