

Public Lecture, UNM-PNM STATEWIDE HIGH
SCHOOL MATHEMATICS CONTEST 2024-2025

How To Thrive In the Age of AI



*Professor Po-Shen Loh
Mathematics Department
Carnegie Mellon University*

Abstract. As AI advances at shocking speed, what is the future of humanity? How should people develop skills that will still be useful in a world filled with automation? The speaker, Carnegie Mellon math professor Po-Shen Loh, traveled to 100 cities last year, speaking with (and learning from) 250 audiences on this topic, on a tour which was even covered by the Wall Street Journal. His perspective combines insight from having served as the national coach of the USA Math Olympiad team for a decade, together with his firsthand experience inventing new solutions for large-scale real-world problems from pandemic control to problem-solving education. In this talk, he will share his latest recommendations on how to lean into what makes us human, how to navigate the future landscape of education (including college), and how to learn how to solve unfamiliar problems. Many of his recommendations are quite different from how students and parents currently approach life. To substantiate this advice, he will also share his own story of how he used these principles to invent some of the real-world solutions mentioned above.

Profile. Po-Shen Loh is a social entrepreneur and inventor, working across the spectrum of mathematics, education, and healthcare, all around the world. He is a math professor at Carnegie Mellon University, and served a decade-long term as the national coach of the USA International Mathematical Olympiad team from 2013-2023. He has pioneered innovations ranging from a scalable way to learn challenging math live online at comparable engagement to live-streaming entertainment, to a new way to control pandemics by leveraging self-interest.

As an academic, Po-Shen has earned distinctions ranging from an International Mathematical Olympiad silver medal to the United States Presidential Early Career Award for Scientists and Engineers. His scientific research considers a variety of questions that lie at the intersection of combinatorics (the study of discrete systems), probability theory, and computer science. As an educator, he was the coach of Carnegie Mellon University's math team when it achieved its first-ever #1 rank among all North American universities, and the coach of the USA Math Olympiad team when it achieved its first-ever back-to-back #1-rank victories in 2015 and 2016, and then again in 2018 and 2019. His research and educational outreach takes him to cities across the world, reaching over 10,000 people each year through public lectures and events, and he has featured in or co-created videos totaling over 20 million YouTube views.

Po-Shen received his undergraduate degree in mathematics from Caltech in 2004, graduating with the highest GPA in his class. He received a master's degree in mathematics from the University of Cambridge in 2005, where he was supported by a Winston Churchill Foundation Scholarship. He continued his studies at Princeton, supported by a Hertz Foundation Fellowship and a National Science Foundation Graduate Research Fellowship, where he completed his Ph.D. in mathematics at the end of 2009, and has been on the faculty at Carnegie Mellon University ever since.

10:00-11:00 Saturday
8 February 2025
Auditorium, SMLC 102

All are welcome! Please attend
in-person or register for Zoom.
Registration link



Register by QR-code!