

## Artificial Intelligence and autonomous vehicles





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Learn about 2004's pivotal breakthrough for autonomous cars, when the Defense Advanced Research Projects Agency created the DARPA Grand Challenge under the direction of our guest speaker **DR. TONY TETHER.** The autonomous vehicle competition turbocharged development, using advances in AI, mobile computing, sensors, computer vision, and LIDAR. Technology behind SIRI, which led to Alexa and Google Assistant, showed that a computer could find information by searching the net. That critical functionality allows autonomous vehicles to predict the road and traffic ahead.

By 2019, many car and technology companies had implemented autonomous car programs, and Google's Waymo launched the world's first commercial self-driving car service. Guest speaker **NICK ARMSTRONG CREWS**, Senior Software Engineer at Waymo and UAA alum, will explain how self-driving cars can reduce the number of fatal car accidents and transform transit in our daily lives.



"What was behind the creation of SIRI and Autonomous Cars?"

**Dr. Anthony J. Tether** directed DARPA from 2001 to 2009 and was responsible for managing breakthrough technologies and

capabilities for high-payoff, innovative R&D to benefit national security. He also created and initiated the DARPA Grand Challenge. Tether was founder, CEO and President of The Sequoia Group, CEO for Dynamics Technology Inc., and Vice President at SAIC, and Ford Aerospace Corp. He was also the Director, National Intelligence in OSD, and served on the Army, Navy and Defense Science Boards, and the Office of National Drug Control Policy R &D Committee. He is the recipient of multiple prestigious awards, including the National Intelligence Medal, the DOD Civilian Meritorious Service Medal, and the Army Superior Civilian Service Award.



"Self-driving cars are here... and they're awesome!"

Nick Armstrong Crews is a career roboticist building self-driving cars to eradicate death caused by auto accidents.

Born in Nome and raised in Fairbanks, he studied math and computer science at UAA, leading to doctoral studies in robotics at Carnegie Mellon. He has worked on AI for Mars rovers at NASA Ames, drone vision at MIT Lincoln Laboratory, hand-held 3D cameras at Heuristic Labs (a start-up he founded), and mobile machine learning at Google. He is currently working on deep learning for perception for self-driving cars at Waymo. He has over 20 patents, dozens of academic publications, and one cat.



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