

## **Boris Stilman**

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## **Turning University Research into the Real World Systems**

In the USA, many research-oriented start-ups are the university spin-offs, i.e., they were originally created within the university's environment. I will describe chronologically the process of creation, survival, and subsequent take-off of such companies on example of STILMAN Advanced Strategies, the company created in 1999 as a spin-off of the University of Colorado at Denver. Intelligent software tools developed at STILMAN for the US Army beat all competition around the world and are considered vital for the US national defense. This lecture includes a comparison of roles of investors, competitive government contracts, large businesses, and foreign sources in obtaining working capital for small companies. The emphasis is on the US government system of competitive awards, especially, in defense, including SBIR (Small Business Innovation Research) as well as those from the federal agencies such as DARPA (Defense Advanced Research Agency), US Army, US Navy, etc. I will provide details of the relationship of a university and the spin-off businesses. Special attention will be payed to the role of customers in developing new problem domains, theoretical ideas, and turning those ideas into working systems.

## **Biography**

Boris Stilman received MS in Mathematics from Moscow State University, Russia, in 1972, and two PhDs in Electrical Engineering and Computer Science from National Research Institute for Electrical Engineering, Russia, in 1984. Based on his 17-year experience in the research project PIONEER led by a former World Chess Champion Professor Mikhail Botvinnik, Dr. Stilman developed Linguistic Geometry (LG), a new theory for solving abstract board games. In 1991-2018, Dr. Stilman was developing the theory and applications of LG at the University of Colorado. A leap in the development LG was made in 1999, when he (with a group of scientists and engineers) founded STILMAN Advanced Strategies, LLC. A growing number of applications of LG developed at STILMAN passed comprehensive testing and powered intelligent defense systems around the world. In 2010, Dr. Stilman broadened the scope of his research on intelligent systems via investigating the structure of the Primary Language of the human brain.

Dr. Stilman published several books and over 200 research papers. He is a recipient of numerous R&D awards including those from the US government agencies such as DARPA and major companies such as Boeing.