The Journey to Consumer Robotics

ABSTRACT: While the applications for robotics are plentiful in theory, matching technical capabilities to real world customer needs at high reliability and practical price points is incredibly difficult, leaving behind large numbers of ambitious, but ultimately failed, attempts to apply robotics to consumer applications. In this talk we will share a bit of our journey with Anki, a company we started working on in 2008 with the goal of identifying and entering markets where robotics and AI can have a real, measurable impact in a short time frame, and then using the technologies and learnings developed for one product as building blocks for the next. We enjoyed an eventful path from our early days as three Robotics Institute PhD students working out of a Pittsburgh living room to a 150 person company (with over a dozen CMU RI grads!) with offices in San Francisco, London, Munich and Shenzhen. We will share a few of the stories and learnings along the journey through multiple product releases, four rounds of venture funding, challenges at the overlap of many disciplines, large scale mass production, and seemingly endless strings of highs and lows. Finally, we are excited to share our next product, Cozmo, a robot character that uses a deep combination of robotics, AI, game design, and animated film-style animation with the aim of bringing a physical character to life with a level of personality, emotion and interaction that has never been possible outside of a screen. This interdisciplinary approach has led us to build a small animation studio within a robotics company with a novel approach to animating physical characters, showing intense levels of attachment and emotional response in all of our early testing. Along with a look at the many years of research and development leading to this product, we will discuss why the SDK that will be released with the launch in October could unlock one of the most capable and affordable robotic platforms for research and education.

SPEAKER BIO:
Boris is co-founder and CEO of Anki, an artificial intelligence and robotics company focused on using these technologies to reinvent everyday consumer experiences. With an initial focus on entertainment, Anki's first product line, Overdrive, is a battle-racing game that allowed a level of physical gameplay and interaction previously not possible outside of video games and was one of the top selling toys of the 2015 holiday season. Anki is releasing its next product line, Cozmo, this fall. Boris has a background in building diverse robotic systems from consumer products to off-road autonomous vehicles and bomb-disposal robots. He earned a B.S., M.S. and Ph.D. from the Robotics Institute of Carnegie Mellon University.

Hanns is co-founder and President of Anki, an artificial intelligence and robotics company focused on creating groundbreaking consumer products. Anki's first product line, Overdrive, is a battle-racing game that allowed a level of physical gameplay and interaction previously not possible outside of video games and was one of the top selling toys of the 2015 holiday season. Anki is releasing its next product line, Cozmo, this fall. Before moving to the US for his MS and PhD in Robotics at Carnegie Mellon, Hanns earned a Dipl. Ing. in Computer Science in Europe with minors in Mechanical and Electrical Engineering. His is currently on LOA from the PhD program at CMU and hopes to find the time to finish his thesis in the not to far future. He is mainly interested in the application of Robotics and AI in real world consumer products.

Host: Martial Hebert
Point of Contact: Stephanie Matvey (smatvey@cs.cmu.edu)