Koren, Yoram | Faculty Emeritus

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Yoram Koren began designing novel robots in the 1980's. Renowned examples include: Assembly Robot where the local action of its gripper was controlled by laser beams (1984); a mobile Nursing Robot to assist bedridden patients (1985); the inflatable robot arm (1990); the world's-first robotic snake (1991); a navigation belt that enables mobility for the blind by utilizing autonomous robot navigation algorithms (1992); and a robotic wheelchair that adapts its speed to the environment (1993).

In the late 1980's Yoram Koren and his former Ph.D. student Dr. Johann Borenstein pioneered autonomous mobile robots. They developed the autonomous mobile robot **CARMEL** that was featured on a **CNN** national program in 1988. (Prof. Koren on CNN https://www.youtube.com/watch?v=oQ-1pnm6MPk)

The associated scientific papers describing CARMEL's motion algorithms have thousands of citations. In 1992 CARMEL won the 1st Autonomous Mobile Robot Competition sponsored by the Association for the Advancement of Artificial Intelligence, beating nine other mobile robots from leading institutions.