

After receiving a BA in physics from the University of Buffalo in 1961 and acceptance as a PhD student after a year in physics at Purdue, the human factors course I took for an “easy A” in my junior year finally took hold of my head. E.J. McCormick took me into the psychology department where I became an experimental psychologist and earned a master’s degree. EJ encouraged me to join the Human Factors Society, which had formed only a few years earlier. The next two years were spent at the Massachusetts Institute of Technology psychology department (now Brain and Cognitive Science) receiving a second masters. My PhD from SUNY at Buffalo came in 1967.

I spent the next 15 years at Calspan (nee Cornell Aeronautical Laboratory), becoming the Section Head and growing the group to a Department. Our growth came from significant Instructional Systems Development programs for the Air Force and Navy. When the Human Factors Society received a contract from the US Nuclear Regulatory Commission to develop a long-range human factors plan for research, I was selected as one of the HFS study group members, specifically for training and training devices.

Using my experience in training development, I developed what was then a very novel idea of using a digitizing tablet and a computer for computer-based training (CBT). Trainees would interact with photos, diagrams, and 3D replicas of their job equipment and environments, receiving feedback and instructions on a monitor. After new owners decided that human factors was not profitable enough and disbanded my group in 1982, I started a company to complete the development of the CBT system using Commodore 64 computers. To my relief, manufacturing companies liked this new concept and for the next 20 years my small company developed industrial training programs for US and foreign manufacturers (we switched to PCs and sophisticated commercial training systems as they became available).

As a sideline I took occasional assignments from attorneys as a human factors expert. By the time the training market moved away from what I had been doing in the early 2000s, I got out of that business and concentrated on consulting, but mostly expert testimony. During that same time period I was invited to be on the board of a new aerospace company, Stavatti Aerospace, for which I am currently the Chief Scientist and Director of Human Factors Engineering.

For several years I have served on standards writing committees of AAMI and ASTM. As an aid for the many people who are dealing with human factors issues but come into the field from many disciplines other than experimental psychology, I recruited a group to coauthor a publication, *Evaluating Systems that Involve Human Behavior and Control*, offered at no charge on the HFES website.

Still not ready to retire, I’ve renewed my interest in exploring a new way to understand the conscious experience, and its relevance to AI and robots.

Career philosophy/mission statement: Never stop learning about how the world works. If there is a human factors expert on both sides of a forensics case, at least one of them is wrong.

Advice for students: Understand all elements of the system you are working with and how they interact. Download the free “Analyzing the Performance of Systems ...” document from HFES.

Specialty Area(s): Expert testimony; Applied Psychology; Physics; Human Factors management

Field of Interest(s): Perception, Training, Aerospace, Standards, Conscious experience

Geographic Location: Buffalo NY

Willingness to communicate with students/availability for face-to-face or virtual meetings: yes

If you are willing to communicate with students, how can students contact you? Phone; Email: 716-445-0501; rcspsi@aol.com

Fellow status: Active (all things considered)

Technical Group Affiliation(s): Forensics Professional; Aerospace; (prior affiliations: Training, Health Care)

Year inducted as a fellow: 1983

Awards/Honors: Past president or chair of the Training Technical Group, Forensics Professional Group, HFES Western NY Chapter

Links to publications /Lab website/Research Gate or similar profile:

CV/Resume:

<https://www.jurispro.com/expert/robert-sugarman-pe-fhfes-137>

<https://www.researchgate.net/profile/Robert-Sugarman-2>

<https://www.stavatti.com>