



HFES FELLOWS PROFILE



Name: Philip Smith

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Short biography:

Dr. Smith received an M.S. in industrial and operations engineering in 1976 and a Ph.D. in cognitive psychology and industrial and operations engineering (joint degree) in 1979, both from the University of Michigan. He is President of Cognitive Systems Engineering, Inc.

He is recognized as a leader in air traffic flow

management, air traffic control (including trajectory based operations, airline operations control, airport surface management, human automation interaction, collaborative decision making and the design of distributed work systems. He has also been conducting research on the human factors issues associated with the integration of unmanned aerial systems into the airspace system. His expertise encompasses cognitive systems engineering, human-automation interaction, human factors engineering, artificial intelligence, and instructional design.

Career philosophy/mission statement: As a university professor, my philosophy is that research and teaching should be intertwined. Research activities in part help to keep the topics and examples used in teaching up to date. And for graduate students, participation in research is a key part of a student's education. In terms of my approach to research, a key part of the work is a focus on real world applications in order to both stimulate ideas and to test the new concepts that emerge. My work on the design of distributed work systems, using the collaboration/coordination of FAA traffic flow managers with airline operations control staff (dispatchers), air traffic controllers and pilots as a testbed, is an example of this.

Advice for students: 1. As Einstein said: "Be a voice not an echo". Spend time thinking hard about your strategic plan and focus in order to identify and pursue an important new direction. 2. Make sure you develop expertise in the technologies that are part of the focus for your research.

Specialty Area(s): Academia & Teaching

Field of Interest(s): Aerospace; Applied Research; Automation; Aviation; Cognition; Cognitive Psychology; Decision Making; Educator; Expertise; Human Computer Interaction; Human Error; Human Performance; Industrial Engineering; Training

Geographic Location: Ohio

Willingness to communicate with students/availability for face-to-face or virtual meetings: Yes, I am available

If you are willing to communicate with students, how can students contact you? Email



HUMAN FACTORS AND ERGONOMICS SOCIETY

Fellow status: Active

HFES Technical Group Affiliation(s): Aerospace Systems Technical Group; Cognitive Engineering and Decision Making Technical Group

Year inducted as a fellow: 2001

Awards/Honors: FAA/Industry Collaborative Decision Making Program “Thank You Orange Award”, 2019; International Aviation Psychology Symposium Fellow, 2017; OSU College of Engineering MacQuigg Award for Outstanding Teaching, 2012; Air Traffic Control Association David J. Hurley Memorial Award for Research in Collaborative Decision Making, 2009; Best Paper Award, Proceedings of 2008 Air Traffic Control Association Annual Meeting; Fellow, Human Factors and Ergonomics Society, 2001; National Aviation Safety Award, Airline Dispatchers Federation, 2001; Airline Dispatchers Federation "National Aviation Safety Award" for 2001; Award for “Best Paper” in Human Factors in 1999, (Jerome H. Ely Human Factors Article Award); Advisor for student winning award for “Best Paper submitted to the Training Systems Technical Group” at the Annual Meeting of the Human Factors and Ergonomics Society, 1996; Advisor for student winning award for “Best Paper” at the Annual Meeting of the Human Factors and Ergonomics Society, 1995; Advisor for student winning award for “Best Paper” at the Annual Meeting of the IEEE Society on Systems, Man and Cybernetics, 1995; Award for “Best Publication”, American Society for Information Science, 1994; Kleiner Award for “Best Paper” in Clinical Laboratory Science, 1993; Advisor for student winning award for “Best Paper” at the Annual Meeting of the Human Factors and Ergonomics Society, 1993; Award for “Most Innovative Software”, National Library and Information Technology Association Conference, 1992; Award for “SIG of the Year” to SIG-Classification Research from ASIS (for role as program chair), 1992; "Best Paper" Award, SIGIR '89; Collaborative Research Award, The Ohio State University, 1988

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

<https://u.osu.edu/smith.131/>

[CV/Resume](#)