FELLOW PROFILE

Name: Nancy J. Cooke

Degrees, certifications, etc.:
PhD, Cognitive Psychology, 1987, New Mexico State University, Las Cruces, NM
MA, Experimental Psychology, 1983, New Mexico State University, Las Cruces, NM
BA, Psychology, 1981, George Mason University, Fairfax, VA

Current status:
Professor, Cognitive Science & Engineering, Arizona State University and
Science Director, Cognitive Engineering Research Institute

Home page:

https://webapp4.asu.edu/directory/person/559491
www.cerici.org
www.certt.com

Biography (How you got involved in the field, your major career activities and milestones):

I really "lucked into" the field of human factors. As an undergraduate at George Mason I started out as a foreign language major and quickly decided that I had no future in that area. I was, however, interested in my introductory psychology course and like so many, decided that counseling may be the career for me. I did some volunteer work as a peer counselor, but found that pretty boring. At the same time, I was enjoying my computer science class. I went to the career center and someone there gave me a book that let me connect computer science and psychology. Human factors came up at the intersection. I had no idea what it was and did not have the web to find out, but somehow I found the Human Factors Society and wrote (a hard copy letter) to Mike Strub who must have been serving in some local chapter role. Coincidentally he was also a judge in my 8th grade science fair project on noise pollution!

Mike sent me some information on human factors and graduate programs. I liked what I read and applied to several graduate programs. I set my sights on eventually becoming a human-computer interaction specialist at IBM. Here is a funny story ....Bill Howell, then at Rice University, worked hard to recruit me to Rice for graduate school. When I told him that I had selected New Mexico State University instead, he told me that I was making a big mistake that I would come to regret. Interestingly, once my PhD was completed at NMSU, Bill hired me into my first faculty position at Rice University. (My name had changed from Jaworski to Cooke in the interim so I don't think that Bill connected those dots!)

While in graduate school I had the opportunity to work with Roger Schvaneveldt as my advisor and Frank Durso who visited NMSU frequently during that time. It was great to do research with them and Frank soon convinced me that I would prefer an academic job over IBM. He was right and I am grateful for that advice. I ended up taking the job at Rice University, then moving back to New Mexico State as faculty for 10 years, and then onto Arizona State University. My move to Arizona State University in late 2002 was inspired by 9/11 and my strong desire to do something to prevent future events like that. This dovetailed with my attempts to establish a not-for-profit research institute which would be nimble at transition from

research to application. ASU provided me with an opportunity to start the Cognitive Engineering Research Institute. Another turning point in my research was when I met Eduardo Salas who convinced me that cognitive research needed to be applied to teams. I have been working on that problem ever since. Looking back I am most grateful for some terrific mentors, students, and colleagues who I have had had the fortune to know and to work with along the way. There are many but the most influential have been Mike Strub, Bill Howell, Roger Schvaneveldt, Frank Durso, and Eduardo Salas). Thank You!!!

Employment History (List top 5 positions):

2003-present   Professor, Applied Psychology, Arizona State University Polytechnic
2003-present   Science Director and board member, Cognitive Engineering Research Institute, Mesa, AZ
1992-2002   Assistant/Associate ('94)/Full Professor ('99), Department of Psychology, New Mexico State University, Las Cruces, NM.
1987-1992   Assistant Professor, Department of Psychology, Rice University, Houston, TX.
1981-1987   Graduate Research Assistant, Department of Psychology and Computing Research Laboratory, New Mexico State University, Las Cruces, NM.(Roger Schvaneveldt, advisor)

What were your significant contributions to the field?
First of all, I hope that I'm not finished contributing! I think I'm best known for my early work in knowledge elicitation methods and more recently for studies of team cognition in synthetic task environments as well as human factors of unmanned aerial systems.

Did you receive any notable awards or recognition during your career?
  Appointed to the National Academies of Sciences Soldier Systems Panel (2010)
  Elected Fellow of the American Psychological Association in 2009
  Appointed to National Academies of Sciences National Research Council Committee on Human Systems Integration (now Board on Human Systems Integration, January 2007 – present)
  Appointed Chair National Academies of Sciences National Research Council Board on Human Systems Integration (starting January 2012)
  Recipient of the 2006 Human Factors and Ergonomics Society's O. Keith Hansen Outreach Award.
  Appointed to National Academies of Sciences National Research Council Committee on Human-System Design Support for Changing Technology (May 2005 – March 2007)
  Appointed to National Academies of Sciences National Research Council Committee on the Safety and Security of Spent Nuclear Fuel Storage (March 2004 – January 2005)
  Elected Fellow of the Human Factors and Ergonomics Society in 2000
  On short list for AFRL Chief Technologist position (2011)
  Recipient of Jerome H. Ely Award for the most outstanding article in the *Human Factors* journal in 2010.   Gorman, Cooke, & Amazeen, "Training Adaptive Teams."

Which articles in the journal *Human Factors* would you say were the most influential to you and your research or practice?

Danny Gopher's article on "Transfer of skill from a computer game trainer to flight"
And Raja Parasuraman's article on "Humans and automation: Use, misuse, disuse, abuse."

Please provide any links to your online articles, essays, blogs, Wikipedia pages, etc., that pertain to your research, publications or practice.

http://www.cerici.org/ceri_publications.htm

What advice would you give someone considering HF/E as a profession?

It's all about people…I cannot overemphasize the importance of surrounding yourself by friendly and hard-working colleagues, students, and mentors. They make the work rewarding and fun. At the same time, it is of critical importance that you take every chance you get to work directly with the users of your target systems.