



**Human
Factors
and
Ergonomics
Society**

FELLOW PROFILE

Name: Gavan Lintern

**Degrees, certifications,
etc.:** PhD University of Illinois,
1978
MA And BA University of
Melbourne, Australia, 1971
and 1969

Current status: Semi-retired

Home page: www.cognitivesystemsdesign.net



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

Gavan has worked in aviation-related human factors research, specializing in flight simulation research for the first part of his career (1970 – 1995). More recently, he has specialized in Cognitive Systems Engineering, focusing on cognitive requirements and training needs for complex military platforms.

Employment History (List top 5 positions):

University of Illinois, faculty member at the Institute of Aviation (1985-1997)

Head of human factors at the Defense Science and Technology Organisation in Melbourne (1997-2001)

Senior scientist with Aptima, Inc in Boston (2001-2003)

Chief scientist with General Dynamics Advanced Information Systems in Dayton Ohio (2003-2009)

Gavan retired from General Dynamics in early 2009

What were your significant contributions to the field?

Development of an ecologically inspired theoretical basis of skill transfer for flight training
Development of a theoretical understanding of Cognitive Work Analysis and explication of its methods and procedures

Did you receive any notable awards or recognition during your career?

Jerome H. Ely Award, 1991, presented by the Human Factors Society for best paper in Volume 32 of the Human Factors journal.

George E. Briggs Dissertation Award, 1978, presented by Division 21 of the American

Psychology Association for original research exhibiting creative application of scientific inquiry in the area of Engineering Psychology.

Australian National Leader of Technology Panel HUM-TP2 (Training Technology) of the International (Australia, Canada, New Zealand, UK, USA) Technical Cooperation Program, 1999- 2001

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

Lintern, Gavan (2010). A Comparison of the Decision Ladder and the Recognition-Primed Decision Model. *Journal of Cognitive Engineering and Decision Making*, Volume 4, Number 4, Winter 2010, pp. 304–327.

Lintern, G., & Liu, Y. (1991). Explicit and implicit horizons for simulated landing approaches. *Human Factors*, 33, 401-417.

Lintern, G. (1991). An informational perspective on skill transfer in human-machine systems. *Human Factors*, 33, 251-266.

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

Lintern, Gavan (2009). The Foundations and Pragmatics of Cognitive Work Analysis: A Systematic Approach to Design of Large-Scale Information Systems. Retrieved April 5, 2009, from [http://www.cognitivesystemsdesign.net/Downloads/Foundations & Pragmatics of CWA \(Lintern2009\).pdf](http://www.cognitivesystemsdesign.net/Downloads/Foundations & Pragmatics of CWA (Lintern2009).pdf)

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

The potential for Human Factors and especially Cognitive Engineering is enormous. Western society has been dominated by a techno-centric mindset that has had us looking to technology for answers to pervasive problems. Social forces are converging that are revealing the limitations of this mindset. Human Factors and Cognitive Engineering are disciplines that will grow in stature as it becomes more obvious to society at large that there is something missing from the way we are developing technologies and that a behavioral perspective is essential for reshaping this trajectory.