

BIOGRAPHICAL SKETCH

Joseph Engler	Associate Research Scientist
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EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Iowa	Ph.D.	2011	Industrial Engineering
University of Iowa	MS.	2009	Industrial Engineering
The Franciscan University	BS.	2004	Mathematics/Computer

Professional Experience

4/13 – Present	Associate Research Scientist	Operator Performance Laboratory University of Iowa, Iowa City, IA
4/12 – 4/13	Postdoctoral Scholar	Operator Performance Laboratory University of Iowa, Iowa City, IA
9/11 – 5/12	Adjunct Lecturer	University of Iowa, Iowa City, IA
11/05 – 4/12	Sr. Systems Engineer	Rockwell Collins, Cedar Rapids, IA
6/04 – 11/05	Software Engineer/Instructor	The Franciscan University, Clinton, IA

Extensive knowledge of deterministic chaos, complex adaptive systems, machine learning, data mining and object oriented programming

Honors, Awards and Other Professional Activities (only recent shown)

- 2008 Rockwell Collins Government Systems Engineer of the Year
- 2004 Member Alpha Tau Omega Honor Society
- 2004 Member Mu Sigma Eta Science Honor Society

Related Publications

- Engler, J., Schnell, T., & M. Walwanis “Deterministically Nonlinear Dynamical Classification of Cognitive Workload”, *Proc. Of the 2013 IITSEC*, Orlando, Fl., December 2013.
- Engler, J. & Schnell, T. “Entropic Skill Assessment of UAS Operators”, in preparation for submission.
- Engler, J. & Schnell, T. “Elemental Network Analysis of a Cognitive Fidelity Experiment”, in preparation for submission to *Human Factors*.
- Engler, J. & Schnell, T. “Classifying Workload using Discrete Deterministic Nonlinear Models across Subject Populations and for Extended Time” submitted to *IEEE Transactions on Human-Machine Systems*
- Engler, J. & Kusiak, A. “Modeling an Innovation Ecosystem with Adaptive Agents”, *Intl. Jnl. Of Innovation Science*, Vol. 3, No. 2, pp. 55-68, 2011.
- Engler, J. & Kusiak, A., “Mining Authoritativeness of Collaborative Innovation Partners”, *Intl. Jnl. of Computers, Communications and Control*, Vol. 5, No. 1, pp. 42-51, 2010.
- Engler, J. & Kusiak, A., “Web Mining for Innovation”, *Mechanical Engineering*, Vol. 130, No. 11, pp. 38-40, 2008.
- Engler, J., “Increasing Yields with Entropy-based Analysis of Test Data”, *Proc. of the 2010 IEEE AUTOTESTCON*, Orlando, FL, September 2010.

- Jones, T. & Engler, J. "PACO: A Predictive Analysis System for Manufacturing Test", Proc. of the 2010 IEEE AUTOTESTCON, Orlando, FL, September 2010.
- Engler, J. & Kusiak, A. "Agent-based Control of Thermostatic Appliances" Proc. of the 2010 IEEE Green Technologies Conf., Grapevine, TX April 2010.
- Engler, J. "Optimization of Test Engineering Utilizing Evolutionary Computation", Proc. of the 2009 IEEE AUTOTESTCON, Anaheim, CA, September 2009.
- Engler, J. "Mining Periodic Patterns in Manufacturing Test Data", Proc. of the 2008 IEEE SOUTHEASTCON, Huntsville, AL, March 2008.