Wunsch, Donald C.
PROFESSOR
Electrical & Computer Engineer
Personal Page

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Campus Associations

- Applied Computational Intelligence Laboratory
- Student Design and Experiential Learning Center
- Intelligent Systems Center
- Catholic Newman Center
- Youn Wha Rya

Education
University Of Washington, Doctor of Philosophy, 1991

Accomplishments
Previously: Texas Tech, Boeing, Rockwell International, and International Laser Systems.
IEEE Fellow, INNS Fellow, Senior Fellow, previous INNS President, IJCNN General Chair, Boards: IEEE Neural Net Council, INNS, UM Bioinformatics Consortium.

Professional Links

- Wunsch Google Scholar Profile (papers, citations)
- Clustering Book
- Survey of Clustering Algorithms, IEEE Xplore
- Wunsch LinkedIn page

Biography
Donald Wunsch is the M.K.. Finley Missouri Distinguished Professor at Missouri University of Science & Technology (Missouri S&T).

Earlier employers were: Texas Tech University, Boeing, Rockwell International, and International Laser Systems.

His education includes:
Executive MBA - Washington University in St. Louis,
Ph.D., Electrical Engineering - University of Washington (Seattle),
M.S., Applied Mathematics (same institution),
B.S., Applied Mathematics - University of New Mexico.

Key research contributions are: Clustering, including hierarchical clustering and biclustering; Adaptive resonance and Reinforcement Learning architectures, hardware and applications; Neurofuzzy regression; Traveling Salesman Problem

Distance Courses

- **2017 Fall Semester**
- Special Research and Thesis

- **2017 Spring Semester**
- Special Research and Thesis
- Adaptive Dynamic Programming

heuristics; Smart Grid; Robotic Swarms; and Bioinformatics. He has produced 18 Ph.D. recipients in Computer Engineering, Electrical Engineering, and Computer Science; and has over 400 publications including nine books.

He is an IEEE Fellow and previous INNS President, INNS Fellow and Senior Fellow 07 - present, and served as IJCNN General Chair, and on several Boards, including the IEEE Neural Net Council, International Neural Networks Society, and the University of Missouri Bioinformatics Consortium. He chaired the Missouri S&T Information Technology and Computing Committee, a Faculty Senate Standing Committee. He received the 2015 INNS Gabor Award for neural networks in engineering.

Research Interests

Clustering, Neural Networks, Reinforcement Learning, Approximate Dynamic Programming, Adaptive Dynamic Programming, Adaptive Critic Designs, Adaptive Resonance Theory, Fuzzy Systems, Evolutionary Computation, Particle Swarm Optimization, Nonlinear Regression, Memristors, Game of Go (Baduk, Weichi), Traveling Salesman Problem, Prisoner's Dilemma Problem, Robotic Swarms, Bioinformatics, Self-Healing Critical Infrastructure, Smart Grid, Critical Infrastructure, Cybersecurity, applications of these

Latest Scholars' Mine Publications

- Spatial-temporal reasoning applications of computational intelligence in the game of Go and computer networks

- Spiking neural networks encoding and decoding algorithms for time series estimation and system identification

- A comparison of near-infrared and visible imaging for surveillance applications

- Robust evolutionary algorithms

- Mutual Attraction Guided Search: a novel solution method to the Traveling Salesman Problem with vehicle dynamics