

ABET FACULTY INFORMATION SHEET

For
GENE J.-W. HOU

ACADEMIC APPOINTMENT

Rank: Professor of Mechanical Engineering
Appointment: Full-Time

EDUCATION

Doctor of Philosophy (Mechanical Engineering), University of Iowa, 1983
Master of Science (Mechanical Engineering), National Taiwan University, 1976
Bachelor of Science (Mechanical Engineering), National Cheng Kung University, 1974

SERVICE TO OLD DOMINION UNIVERSITY

Total Years of Service: 26; 1983-Present

OTHER PROFESSIONAL AND INDUSTRIAL EXPERIENCE

None

CONSULTING ACTIVITIES AND PATENTS

Residence Consultant, Institute of Computational Applications in Science and Engineering (ICASE), NASA Langley Research Center, June 1994-Sept. 1996.

PROFESSIONAL REGISTRATION

None

PRINCIPAL PUBLICATIONS IN PAST FIVE YEARS

1. Lin, C., Hou, G., Shen, Y. and Garcia, H., "An Integrated Simulation Design with Three-Dimensional Motors and a Hydraulic Stewart Simulator," Paper No. AC-2008-458, Proceedings of the 115th ASEE Annual Conference and Exposition, June 22-25, Pittsburgh, PA 2008
2. Tanuku, S. V., Hou, M. T. and Hou, G., "Stochastic Optimization Formulation for Structure Design", presented at the 39th Annual Conference of the Southwest Decision Sciences Institute, 4-8 March, 2008, Houston, TX. The full length paper was published in the conference proceedings.
3. Kaneko, H., Bey, K. S. and Hou, G. J.W., "A Discontinuous Galerkin Method for Parabolic Problems with Modified *hp*-Finite Element Approxim " *Applied Mathematics and Computation*, Vol. 182, No. 2, pp. 1405-1417, 2006

4. Kaneko, H., Bey, K. S. and Hou, G. J.W., “Discontinuous Galerkin Method for Parabolic Problems “, *Applied Mathematics and Computation*, Vol. 182, No. 1, pp. 388-402, 2006
5. Nguyen, D. T, Honrao, A. P., Hou, G. J-W., Akan, O. and Baysal, O., "Unsymmetrical and Symmetrical Sparse Iterative Algorithm with Multiple Right-Hand-Sides Strategies”, *WSEAS Transactions on Computers*, Vol. 5, No. 8, pp. 1694-1700, 2006
6. Gumbert, C. R., Hou, G. J-W. and Newman, P. A., “ High Fidelity Computational Optimization for 3-D Flexible Wings: Part I – Simultaneous Aero-Structural Design Optimization (SASDO)”, *Journal of Optimization and Engineering*, Vol. 6, No. 1, pp. 117-138, 2005
7. Gumbert, C. R., Newman, P. A. and Hou, G. J-W., “High-Fidelity Computational Optimization for 3-D Flexible Wings: Part II – Effect of Random Geometric Uncertainty on Design”, *Journal of Optimization and Engineering*, Vol. 6, No. 1, pp. 139 – 156, 2005

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL SOCIETIES

Professional Memberships

American Society of Mechanical Engineers

American institute of Aeronautics and Astronautics

SAE, Engineering Society for Advancing Mobility Land Sea Air and Space.

HONORS AND AWARDS

College Excellence Award in Industry Partnering, 2002

College Most Inspiring Faculty Award, 1993, 2000

SAE Ralph R. Teeter Educational Award, 1988

Recipient of NSF Presidential Young Investigator Award, 1987

Outstanding MEM Faculty Award, 1985, 1996

INSTITUTIONAL AND PROFESSIONAL SERVICE IN LAST FIVE YEARS

Member, College Graduate Program Director Committee, 2005-present

Member, College Library Committee, 1997-Present

PROFESSIONAL DEVELOPMENT ACTIVITIES IN LAST FIVE YEARS

None