

DUŠAN N. ŠORMAZ

RESUME

OBJECTIVE

Looking for funded projects in the application of knowledge based (intelligent) systems in design and manufacturing.

EDUCATION

- December, 1994, University of Southern California, Los Angeles, CA, Ph.D. in Industrial & Systems Engrg. (GPA 4.0/4.0)
Dissertation title: "Knowledge-based Integrative Process Planning System using Feature Reasoning and Cost-based Optimization", Advisor: Professor Behrokh Khoshnevis
- May, 1995, University of Southern California, Los Angeles, California, M.Sc. in Computer Science (GPA 3.72/4.0)
- October, 1985, University of Novi Sad, Novi Sad, Yugoslavia, M.Sc. in Industrial Engineering (GPA 9.6/10)
- October, 1979, University of Novi Sad, Novi Sad, Yugoslavia, B.Sc. in Mechanical Engineering (GPA 9.56/10)

PROFESSIONAL EXPERIENCE

- 2003 – Ohio University, Athens, OH, Associate Professor, Industrial and Manufacturing Systems Engineering
- 1995 - 2003 Ohio University, Athens, OH, Assistant Professor, Industrial and Manufacturing Systems Engineering
- 1997 - 1999 Adizes Institute, Branch Office Yugoslavia, Novi Sad, Consultant (on leave from Ohio University)
- 1994 - 1995 University of Southern California, Postdoctoral Research Associate
- 1990 - 1994 University of Southern California, Research and Teaching Assistant
- 1987 - 1988 Cranfield Institute of Technology, Cranfield, UK, Visiting Research Fellow
- 1980 - 1990 University of Novi Sad, Yugoslavia, Teaching and Research Assistant
- 1979 - 1980 University of Novi Sad, Yugoslavia, Design Engineer

COURSES TAUGHT

Undergraduate courses: Industrial Computer Simulation, Product and Process Design, Applications of Mathematical Programming, Introduction to Operations Research, Introduction to Systems Engineering, Inventory and Manufacturing Control II, Engineering Economy

Graduate only courses: Computer Integrated Manufacturing, Intelligent Engineering Systems, Geometric Modeling in Manufacturing, AI Planning in Manufacturing, Introduction to Quality Control

RESEARCH INTERESTS AND RESULTS

- Interested in application of various artificial intelligence techniques and simulation methodology in manufacturing.
- Interested in research in computer integrated manufacturing, CAD/CAM systems and the application of information technologies to the factory of the future.
- Participated in development of FIPER Cost Estimation tool, and developed Cost modeling library
- Developed 3I-PP prototype for intelligent process planning.
- Developed a framework for automated process planning and its integration with feature recognition and process scheduling activities.
- Developed algorithms for a feature interaction analysis and machining process selection in hole making and milling for automated process planning.
- Developed and implemented space search-based algorithms for sequencing of operations in process planning.

RESEARCH PROJECTS AND SUPPORT

- NIST (ATP) Federated Intelligent Production Environment, 11/1999-11/2003, (OU \$1.1 million, Team \$22 Million), funded, joined research team as co-PI in July 2001. (PI: Mike Paridis, GEAE)
- Development and implementation of IMPlanner modules for feature mapping and process selection, Delphi Automotive Systems, January 2003, funded, \$12,000.00
- Generation of manufacturing features and alternative process plans, a case study, Delphi Academic Partnership Master Agreement, PI, 2002, funded, \$12,000.00
- Distributed System for Evaluation of Alternative Manufacturing Plans and Systems, Stocker Endowment Fund, Ohio University, Matching support for NSF proposal, approved but not funded, 2001. \$18,063.
- Case-based reasoning for Incremental Process Planning, Stocker Endowment Fund, Ohio University, funded, 2001. \$21,095.

Ohio University, IMSE Department, 277 Stocker Center, Athens, OH 45701-2979

Phone: (740) 593-1545, Fax: (740) 593-0778, E-mail: sormaz@ohio.edu, URL: www.ent.ohiou.edu/~sormaz

- Research Challenge program for NSF Proposal Distributed System for Evaluation of Alternative Manufacturing Plans and Systems, Ohio University, 2001, \$6000.00
- Distributed & Parallel Optimization for Solving Combinatorial Optimization Problems, PI, Paraster, Inc., funded \$14,969.00
- Stocker faculty summer fellowship, Russ College of Engineering and Technology, 2000, 1996, \$20,000.00
- Feature interaction modeling and visualization of process planning, Stocker Endowment Fund, Russ College of Engineering and Technology, 2000, funded \$24,200.00
- Research challenge program for CAREER: Intelligent Process Planning for Collaborative Manufacturing Integration, Ohio University, 1999/2000. \$6,000.00
- CAREER: Intelligent Process Planning for Collaborative Manufacturing Integration, Proposal to NSF, 1999. not funded, \$200,000.00
- Intelligent manufacturing planning using case-based reasoning, pilot project on feasibility, OU - IMSE department, 2000
- Stocker new faculty research initiation support, Russ College of Engrg. and Technology, 1995/96., \$10,000.00

AWARDS, HONORS AND SCHOLARSHIPS

- Marvin E. and Ann D. White Research Award, Ohio University, IMSE Department, 2003, 2004.
- Marvin E. and Ann D. White Teaching Award, Ohio University, IMSE Department, 2001.
- Graduate Assistantship at University of Southern California, 1990-1994
- Fulbright Program Grant for Ph.D. studies in USA, 1990/91.
- Province Vojvodina Research Scholarship for study in UK, 1987/88, Scholarship for graduate students, 1980-1983
- University of Novi Sad Scholarship for the best students, 1976-1979, Award for the best student in the class, 1975- 1979.

PROFESSIONAL NETWORK

- Senior member of IIE and SME, Member of the IEEE and ASEE
- Member of AIIM (Alpha Pi Mu) - Industrial Engineering Honor Society

LANGUAGES

Fluent in English and Serbian, substantial knowledge of Russian and German.

PUBLICATIONS

Journals (in last five years):

1. D. N. Sormaz, J. Arumugam, S. Rajaraman, Integrative Process Plan Model and Representation for Intelligent Distributed Manufacturing Planning, *International Journal of Production Research*, Vol. 42, No. 17, p. 3397 – 3417, 2004.
2. D. N. Sormaz, J. Arumugam, Algorithm for Feature Interaction Analysis in Design and Manufacturing Process Planning, submitted to *Computers and Industrial Engineering, An International Journal*, 2003.
3. D. Sormaz, B. Khoshnevis, "Generation of Alternative Process Plans in the Integrated Manufacturing System", *Journal of Intelligent Manufacturing*, Vol 14, No. 6., pp . 509-526 2003.
4. D. Koonce, R. Judd, D. Sormaz, D. T. Masel, "A Hierarchical Cost Estimation Tool", *Computers in Industry*, 50 (2003) 293-302.
5. D. Sormaz, B. Khoshnevis "Modeling of Manufacturing Feature Interactions for Automated Process Planning ", *Journal of Manufacturing Systems*, Vol. 19, No.1, pp.28-45, 2000.

Book Chapters:

D. Sormaz, "GT & CAPP: Toward the Integration of Variant and Generative Approaches" in N. Suresh, J. M. Kay, "Group Technology & Cellular Manufacturing, A State-of-The-Art Synthesis of Research & Practice", Kluwer, 1998.

Proceedings editor:

Dusan N. Sormaz, Gursel A. Suer, (editors), *Proceedings of Group Technology/Cellular Manufacturing World Symposium 2003*, IMSE Department, Ohio University, 2003.

Conferences:

Published 45 conference papers (mostly refereed) and made additional 12 presentations in the area of manufacturing planning and intelligent manufacturing. The complete list available upon request. Also published 35 papers in national journals and conferences in Serbian language.

REFERENCES

Available upon request