

RAKESH NAGI

281 Sausalito Drive
East Amherst, NY 14051
(716)-636-8966
e-mail: nagi@buffalo.edu

Department of Industrial Engineering
342 Bell Hall, SUNY at Buffalo
(716)-645-2357 x 2103
Fax: (716)-645-3302

PROFESSIONAL INTERESTS

Industrial and Production Systems Engineering, Production-Logistics Management, and Applied Operations Research.

PROFESSIONAL COMPETENCIES

Facilities Planning and Design

- Wide range of manufacturing and service facilities
- Facility design assessments
- Re-design and re-engineering of existing facilities
- Facility location
- Facility layout

- Flow, Space and Activity Relationships
- Material Handling Systems
- Warehouse Operations

See Industrial Clients on p. 3
See Project Titles on p. 3
Authoring book including industrial cases
Optimization Methods
Departmental, Cellular, Hybrid; Computer-Aided Layout
Aisle Design, Optimal space allocation
Selection, Scheduling & Control
Bin assignments, S/R Routing, I/R and R/F
Data collection

Production Planning and Scheduling

- Wide range of production and service operations
- Production and Operations Strategy & Assessments
- Cycle-Time Reduction

- Forecasting
- Aggregate Planning

- Inventory Control

- Materials Requirements Planning (MRP, MRP II)

- Operations Scheduling

- Project Management

- Logistics and Supply-Chain Management
- Lean Manufacturing and Just-In-Time Systems

See Industrial Clients on p. 3
See Project Titles on p. 3
Published and developed new industrial techniques; software developed; 4 clients
Causal, Time Series and AI methods
Doctoral dissertation on Hierarchical production management
Reduction, service level improvement, optimal policies.
Experience on CINCOM, Manage-2000; BOM, routing and lead-time planning
Just-In-Time operations scheduling; industrial applications
Multi-criteria, multi-project software developed; Fisher-Price application
Research and teaching
Training activities to a Consortium of Delphi Auto's 16 suppliers (NYS funded)

Product Design, Process Planning and Group Technology

- Group Technology (Classification and Coding)

- Research topics in Feasibility and Manufacturability
- Concurrent Engineering (Life-cycle engineering)
- Design Standardization

- Identification of similar designs
- Variant Design (Praxair application)
1/2 Million project with US Army
Parallelizing design to production tasks
Reduction of design time and proliferation

PROJECTS COMPLETED (partial list)

#	Sponsor	Project	Dates
1.	Ferro Electronics, Niagara Falls, NY	Operations Analysis and Plant Layout/Facilities Redesign Studies	2/01 – 4/01
2.	Carborundum, Amherst, NY	Knowledge Acquisition and Scheduling System Design	7/00 – 5/01
3.	Praxair, Tonawanda, NY	Decision Analysis for Marketing SOS plants	TBD
4.	Applied Res. Lab, Penn State University, State College, PA	Data Fusion Concepts and Novel Algorithms for Condition-Based Maintenance	5/99 - 4/00
5.	Republic Drug, Buffalo, NY	Operational Analysis and Facility Redesign Studies	5/99 - 7/99
6.	Imaging and Sensing Technology, Horseheads, NY	Operational Analysis and Facility Design Studies	10/98 - 12/98
7.	Milward Alloys, Lockport, NY	Operational Assessment: Layout and Process Flow	8/98 - 9/98
8.	McKenica Corp., Buffalo, NY	Time Studies, Process Flow and Inventory Control	7/98 - 8/98
9.	A. Lunt Design, Orchard Park	Facility Design and Automation	4/98 - 5/98
10.	National Science Foundation	Facility Layout (Re)Design Approaches	6/98 - 5/01
11.	Graphic Controls, Buffalo, NY	Facility Design Simulation Studies	2/98 - 4/98
12.	Gemcor Inc., West Seneca, NY	Facility Layout: High-bay and Sheet-Metal Areas	8/97 - 9/97
13.	Integral Info. Sys, Amherst, NY	Pinpoint Enhancement Product Development	7/97 - 4/98
14.	National Science Foundation	Agile Manufacturing (Matching Grant)	8/97 - 7/98
15.	AVX Corp., Myrtle Beach, SC	Layout and Productivity Improvements	6/97
16.	Manitoba Corp., Lancaster, NY	Productivity and Automation Enhancement	12/96 - 1/97
17.	Praxair, Inc., Tonawanda, NY	Cold-box and Component Classification Scheme	6/96 - 8/96
18.	Gemcor Inc., Buffalo, NY	Facility Layout under Cyclical Demand	6/96 - 7/96
19.	National Science Foundation	Agile Manufacturing Information System	7/96 - 6/00
20.	Praxair, Inc., Tonawanda, NY	Assessment of Turbine Assembly Facility Layout	10/95
21.	SUNY at Buffalo, RDF Fund	Multi-Resource Multi-Project Management	11/94 - 9/95
22.	American Axle and Mfg., NY	Tool Room Layout Assessment	8/94
23.	Buffalo weaving & belting, NY	Preliminary Facility Assessment	7/94
24.	Premier Image, Buffalo, NY	Operational Assessment at Premier Image	3/94
25.	Murray Fire Apparatus, NY	Plant Layout at R.D. Murray	1/94
26.	US Army, Warren, MI	Opt. Selection of Partners in Agile Manufacturing	8/93 - 9/95
25.	Westinghouse, Baltimore MD	Optimal Facility Design	8/92 - 7/93
26.	Westinghouse, Baltimore MD	Cycle Time Reduction for Antenna Assembly	8/91 - 7/92
27.	Westinghouse, Baltimore MD	Radio-Communications in Manufacturing Systems	1/91 - 12/91
Other Equipment & Educational		Projects	
1.	Society of Mfg. Engineers	Development of Mfg. Automation Program	6/97
2.	STEPTools, Inc., Troy, NY	ST-Developer	1/97
3.	Society of Mfg. Engineers	Development of Mfg. Engineering Program	6/95
4.	SUNY at Buffalo	High Performance Parallel Computer	6/94
5.	SUNY at Buffalo	Various Educational Grants	8/93

INDUSTRIAL CONSULTANCIES (Selected)

1. Praxair, Inc., Tonawanda, NY	2. Gemcor Inc., Buffalo, NY
3. Premier Image, Buffalo, NY	4. Westinghouse, MSTC and ESD, Baltimore, MD
5. Kop-Flex, Inc., Baltimore, MD	6. AVX, Corp., Myrtle Beach, SC
7. American Axle and Manufacturing, Tonawanda NY	8. Buffalo Weaving and Belting, Buffalo, NY
9. Murray Fire Apparatus, Hamburg, NY	10. Maryland Clothing Co. Baltimore, MD
11. Bethlehem Steel, Lackawana, NY	12. Fisher Price, E. Aurora, NY
13. Integral Info. Sys, Amherst, NY	14. Graphic Controls, Buffalo, NY
15. Lunt Design Inc., Orchard Park, NY	16. McKenica Corp., Buffalo, NY
17. Milward Alloys, Lockport, NY	18. Imaging and Sensing Technology, Horseheads, NY
19. Republic Drug, Buffalo, NY	20. Carborundum/ St. Gobain, Amherst, NY
21. Ferro Electronics, Niagara Falls, NY	22. Boeing Co., St. Louis, MO