

Kumar Aditya

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OBJECTIVE

Full-time position as a manufacturing systems or industrial engineer. Desire to use cross-functional skills in facilities design, capacity planning, quality control, supply chain, CAD/CAM and logistics.

EDUCATION

University of Wisconsin – Madison

M.S. Manufacturing Systems Engineering, May 2003

- Overall GPA: 3.84
- Relevant Courses
 - Facilities Planning
 - Operations Management
 - Data Structures and Algorithms
 - Managerial Economics
 - Design and Analysis of Manufacturing Systems
 - Simulation Modeling and Analysis of IE systems
 - Introduction to Programming in Java
 - Rapid Prototyping
 - Financial Accounting
 - Managerial Accounting
 - Computer-Integrated Manufacturing

Indian Institute of Technology (IIT), Bombay, India

B. Tech., Mechanical Engineering, June 2001

- Major GPA: 3.55 Overall GPA: 3.28
- Relevant Courses
 - Computer Graphics For CAD/CAM
 - Analysis/Control of Flexible Manuf. Sys.
 - Object Oriented Prgm. & Simulation
 - Industrial Engineering & Operation
 - Manufacturing Automation
 - Optimization Techniques in Engr. Design

EXPERIENCE

Project Assistant, November 2002 - present

RenewAire

- Performing capacity analysis of residential line manufacturing unit
- Focusing on the process improvement of the existing operations

Quick Response Manufacturing Team Member, January - May 2002

Twin Disc

- Achieved 65 % lead-time reduction (from 20.5 days to 7 days) in order processing and manufacturing of MC-6 products.
- Member of a 6-persons consulting team working with team
- Collected thousands of pieces of data. Developed spreadsheet and analyzed data.

Project Assistant, August 2001– December 2002

University of Wisconsin–Madison

- Supervised and maintained Manufacturing Systems Laboratory containing CNC machines, robots, conveyers, Automatic Storage and Retrieval Systems and Coordinate Measuring Machine.

Teaching Assistant, August – December 2002

University of Wisconsin–Madison

- Conducted lab sessions and discussions with undergraduate and graduate students for the Industrial Engineering course “Introduction to Manufacturing Systems and Analysis”

Software Developer, May 2000 – June 2001

Geometric Software

- Identified several CAD/CAM plug-ins and developed the prototype of TopoDiff, a Computer-Aided Design plug-in, used for Mechanical DeskTop solid modeling package.
- Benchmarked leading solid modeling packages and came up with a user-friendly comparison table featuring their advantages, specialties and limitations.
- Conducted an industrial survey featuring over 40 prominent CAD/CAM user companies. Used feedback to troubleshoot frequent problems encountered in using solid modelers.
- Quantitative analysis of effects of change in process and machining parameters on the output for Multi Surfaces Machining Library, a Computer-Aided Manufacturing software.

COMPUTER SKILLS

Computer Languages	Java, C++, C, Fortran 77, HTML, VRML
Software Experience	AutoCAD, Mechanical DeskTop, ProEngineer, Solid-Edge, Solid Works, MATLAB, Esprit 2001, StarCell, MPX, Pro Model
Operating Systems	Unix, Dos, Windows NT

ACADEMIC PROJECTS

Design & Manufacturing

- Layout design of a LCD manufacturing facility for a variety of product-mix and uneven demand.
- Design, process planning and fabrication of a sample CAD model in a flexible manufacturing system.
- Design and prototype development of a 3-D model using Rapid Prototyping technology.
- Design modifications in a "pick-n-place" mechanism, a mechanism that uses a robot end-effector to transfer light components from one place to another.

Software

- Design and implementation of a "ToDo list" in Java programming environment.
- Simulation of a robot game in Java programming environment.
- Simulation of a railway reservation system in C++ environment.
- Simulation of a job shop and Just-in-Time (JIT) Kanban system using Object Oriented Programming.
- Simulation of a virtual shop floor using Virtual Reality Modeling Language (VRML).
- Design of a vertical internet portal for the Computer Integrated Manufacturing applications in the field of casting.

Business

- Business and strategies analysis, accounting analysis and financial analysis of Sony Corp.
- Comparative analysis of various available technologies in the field of telecommunication using Analytical Hierarchy Process (AHP).

HONORS & AFFILIATIONS

- Society of Manufacturing Engineers
- Core Group member, Indian Graduate Students Associations (IGSA), UW-Madison.
- 5th of more than 200,000 students in my state in the high school examination.
- Secured a nationwide rank of 802 from among about 100,000 candidates nationwide in the Joint Entrance Exam (JEE) for entry into IIT's (Indian Institute of Technology), the best engineering college in India for undergraduate study.

REFERENCES

Prof. Rajan Suri
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Kurt Zimmerman
Biotechnology Degree Program
UW-Madison Medical School
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