M. C. Ramesh

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EDUCATION & RESEARCH

Georgia Institute of Technology, Atlanta, GA
Ph.D. in Mechanical Engineering *September 1998*

Ph.D. Research: A methodology for tracking and managing configuration data for complex products during early stages of development. ***Advisor:*** **Dr. Robert Fulton**

- Developed process and information models for apparel manufacturing using IDEF and NIAM methodologies.
- Developed process and information models for Pediatric Group Practices using IDEF and ER methodologies.

University of Massachusetts, Amherst, MA
M.S. in Manufacturing Engineering *December 1993*

M.S. Research: Automation of Injection Mold Design using Flow Simulation and Artificial Intelligence. ***Advisor:*** **Dr. Byung Kim**

Malaviya Regional Engineering College, Jaipur, India
B.S. in Mechanical Engineering *October 1988*

WORK EXPERIENCE

IBM, Poughkeepsie, NY
Business Process Reengineering Consultant - September 1997 – Present

- Analyzed the current process of designing, manufacturing and managing the supply chain for plastic parts. Identified and developed business and IT solutions.
- Responsible for analyzing and developing tools for configuration management of IBM's products during early stages of development.

Atlanta Electronic Commerce Resource Center (AECRC), Atlanta, GA
Database Administrator and EDI Specialist - January 1995 – August 1997

- Designed and maintained the AECRC metrics database.
- Taught EDI courses to industry representatives and conducted demonstrations of EDI software.

Lockheed Martin Aeronautical Systems Corp., Marietta, GA
AECRC Consultant, February 1996 - April 1996

- Developed process and information models for forging processes.

Warner Robins Air Logistics Center, Warner Robins, GA
AECRC Consultant, June 1995 - August 1995

- Conducted a technical feasibility study on re-engineering of aircraft structural components using laser scanning and X-Ray Computed Tomography.

Innovative Mold and Machine Services, Chicopee, MA
Mold Design Engineer, September 1992 - January 1993

- Designed injection molds, thermoform molds and compression molds.

TexAid Private Ltd., Coimbatore, India
Technical Director, September 1988 - August 1990

- Started business with three partners to manufacture injection molded plastic components for the textile industry.
- Responsible for day to day management of the enterprise.

SKILLS

Catia, ProE; C, Java, SQL; Access and ORACLE RDBMS; IDEF Function and Data Modeling, NIAM, ER and EXPRESS Data Modeling, STEP; UNIX, SunOS; MRP, MRPII; Design of Experiments; Statistical Analysis

COURSES TAUGHT

Engineering Data Management, Numerical Methods for Engineers and Scientists

FOREIGN LANGUAGE SKILLS

French, Hindi, Tamil, Kannada

PUBLICATIONS

"Approaches to Bringing Information Technology to Small Business Applications", Proceedings of the ASME Engineering Database Conference, San Francisco, December 1995.

"Automation of Runner Balancing of Injection Molds using Flow Simulation", ASME Journal of Engineering for Industry, November 1995.

"Prediction of Yarn Tensile Properties Using Artificial Neural Networks", Journal of the Textile Institute, Vol. 86, #3, 1995.

"Prediction of injection molded part properties using artificial neural nets and flow simulation" being reviewed for publication in Polymer Engineering and Science Journal.

"Selection of gate location based on predicted part properties using flow simulation" being reviewed for publication in the Polymer Engineering and Science Journal.

Publications from Ph.D. thesis anticipated upon its completion.

POSITIONS HELD

Class Representative, Malaviya Regional Engineering College, Jaipur, India - 1985
College Representative, Indian Society of Mechanical Engineers, Jaipur Branch - 1988
Captain, Table-Tennis team, Malaviya Regional Engineering College, Jaipur - 1988
Publicity Secretary, India Club, University of Massachusetts, Amherst, MA - 1991
Graduate Vice President, Georgia Tech India Club, Atlanta, GA - 1995

AWARD

Outstanding Graduate Tutor, 1993

- Award given to outstanding tutors in the Minority Engineering Program, University of Massachusetts, Amherst, MA.

ACTIVITIES

American Society of Mechanical Engineers
American Society of Indian Engineers
Georgia Tech India Club

Resume Supplement

1. **Let us know any geographic preferences that you have and the reasons for these choices.**

I would like to work in Atlanta primarily because my spouse is currently pursuing her doctoral degree in Polymer Science at Georgia Institute of Technology. I also love the city, its people and its climate.

2. **Why are you thinking of shifting your career to business and to management consulting and to McKinsey in particular?**

Immediately after my bachelor's degree in engineering, I started a business in Coimbatore, India, with three partners, to manufacture injection molded parts for the Textile industry. I was in charge of the daily operations of the company for two years. Therefore, I was very keen on a career in business right from the beginning. The reason for pursuing advanced degrees in engineering was to gain a strong technical background to augment my managerial skills. So, in my case, I am not shifting my career to business but merely getting back to it.

Management consulting offers opportunities for an individual to make a positive, lasting impact on businesses and its communities as few other careers can. This is because management consultants can bring about change at the highest levels of an organization. I also feel that I posses strong analytical, problem solving and leadership skills necessary for this line of work. In my opinion, the process of pursuing a doctoral degree is very similar to the job of a management consultant. In both cases, a problem and its scope needs to be clearly defined. A detailed study of the problem domain is necessary to generate solution options. These options are evaluated based on technical and practical considerations and the best solution is implemented. Therefore, a doctoral degree, regardless of the subject area, provides the right kind of training for management consulting.

To me, the attractive features of McKinsey are its creative work environment and its emphasis on being a firm of equals with respect to providing solutions for its clients. Ideas are evaluated solely on merit regardless of the seniority, age and experience of the associate. Such an environment permits McKinsey's associates to realize their potential to the fullest, as professionals and as individuals. This freedom is also embodied by the fact that McKinsey does not identify itself with any particular specialty area or with any particular set of management principles. Its only concern is providing long lasting, practical solutions to its clients.

3. **McKinsey places great emphasis on the team approach in solving problems for clients. Select two or three examples of teamwork in school, at work, or in the community and briefly describe your role or contribution to the team.**

My first experience of working closely in a team was as a partner of TexAid Private Ltd., where I was the engineering expert of the team. It was in this position that I learnt to approach problems of strategic and tactical importance from a management perspective, and to find solutions that were technically and economically feasible. I also learned the art of developing an excellent rapport with clients and effectively negotiating on contractual issues.

I have worked closely in team environments as the cultural secretary of the UMASS India Club and as a Graduate Vice President of the Georgia Tech India Club. More recently, I was part of a research project to develop process models for forging. I was the modeling expert of the team that was composed of four other members, three from Lockheed-Martin Aeronautical Systems Corp. (LMASC) and one from Concurrent Technologies Corporation (CTC), the project sponsor. In this capacity, I was able to provide a unique viewpoint since I was the only member of the team who understood both the technical details of the forging process and the modeling methodology used.

4. **Successful McKinsey consultants typically demonstrate considerable personal initiative. Describe one or two situations that occurred at school, at work, or in the community in which you recognized a problem or an opportunity and demonstrated willingness to take action in response to it.**

"Success happens when opportunity meets preparedness". TexAid Pvt. Ltd. is an example of how I lived up to this axiom. On completing my bachelor's degree, I became aware of a business up for sale that was originally owned by a friend's father. I investigated the market and compared the product (injection molded parts for the textile industry) with its competitors. An in-depth analysis indicated that the reason for failure of the company was not the quality of the product but inadequate marketing. I seized this opportunity by purchasing the enterprise along with three partners. TexAid Pvt. Ltd. continues to flourish to this day.

I shall now describe another situation in which I seized an opportunity that presented itself. During the course of the process modeling research effort, I attended a presentation made by the LMASC team members, in which their company's research initiatives were outlined. From the presentation, I gathered that LMASC was in the process of identifying partners for these research efforts. On recognizing that a few of these initiatives were of interest to my research group at Georgia Tech, I organized a meeting between the two parties. This meeting resulted in identification of future research areas for collaboration. My personal initiative in this matter, thus, paved the way for a strong, long-lasting, mutually beneficial relationship.

5. **Successful McKinsey consultants must also be able to motivate others, to develop people, and to win the respect of clients and colleagues. What experiences have you had that indicate such leadership, e.g., election by peers to a leadership position, appointment to a leadership role by "superiors", leading others to create a joint vision, creating opportunities for others, making winners out of colleagues?**

   I have held various leadership positions throughout my student career. In 1985, during my freshman year at Malaviya Regional Engineering College (MREC), Jaipur, India, I was elected 'Class Representative' to the student union. In 1988, during my senior year, I was appointed 'College Representative' to the Indian Society of Mechanical Engineers by the faculty at MREC. . In these capacities, I have been able to lead my colleagues towards growth of their individual abilities and betterment of the respective organizations.

   In 1991, I was elected as 'Publicity Secretary' of the UMASS India Club.

   I have also served as 'Graduate Vice President' of the Georgia Tech India Club in 1995.

6. **If we do not already have your grades and test scores, we would welcome knowing them:**

   Undergraduate GPA - First Division (top 5% of the class)

   Master's GPA - 3.8

   Doctoral GPA - 3.8

   GRE: Verbal - 690 (94%) Quantitative - 790 (97%) Analytical - 740 (95%)

7. **Please be sure to include a list of articles you have published in preferred journals.**

   The list of articles that I have published in preferred journals is included in my resume.