

**ADAM N. ROSENBERG, Ph.D.**

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**WORK OBJECTIVE**

I enjoy difficult mathematical decision support problems and have found that my greatest strength is my ability to find *practical* ways to add value to business operations. Past efforts have yielded benefits measured in tens of millions of dollars per year. Along the way, I have acquired in-depth knowledge of several industries and have met some very interesting people. I hope to take on new challenges and to continue to broaden my experience.

**WORK EXPERIENCE (FULL TIME)**

2000 September through the present, *Six Continents Hotels*. Simulating hotel revenue management and testing alternative algorithms to current system. Augmenting revenue management with demand elasticity price supports for periods of low demand. Developing revenue decision support tools and data environment.

1999 August through 2000 September, *CANAC, Inc.* Continued work on rail line simulation worked on database and interfaces for line simulation environment, and addressed some sophisticated modeling issues.

1997 April through 1999 July, *Provar, Inc.* Designed and wrote a rail line simulation for BNSF Railway that has been used to model their operations. Designed and wrote image processing algorithms for an automated flood plain determination system. Designed and wrote statistical analysis of residual vehicle values for AutoNation USA during its start-up.

1995 November through 1977 April, *InterDigital Communications Corporation*. Designed and wrote an advanced capacity model for CDMA digital cellular telephone technology. Also wrote a simulation for InterDigital which helped designers understand the limitations of existing power control algorithms.

1991 April through 1995 October, *Northwest Airlines*. My airline booking simulation became the yield management optimization currently earning the airline thirty million extra dollars per year. My delay and cancellation reporting software helps decision makers in maintenance and ground operations identify root causes of delays. My jet engine reliability study helped powerplant engineers understand forecasting of engine removals.

1982 April through 1991 March, *AT&T Bell Laboratories*. Designed and wrote airline schedule planning system which was purchased by two airlines and used for fleet assignment. Did economic and network design studies for AT&T long distance network. My simulations influenced product design of self-healing ISDN networks. My mobile telephone studies influenced the design of early cellular telephone networks.

## ACADEMIC WORK EXPERIENCE

1996 March through 1997 April, *Educaid Tutor*. As a one-on-one tutor in the Educaid network I taught Mathematics, Physics, Statistics, Astronomy, and Operations Research at the high school, undergraduate, and graduate levels. The students have ranged from teenagers to working students taking courses for professional growth.

1994 September through 1994 December, *Adjunct Faculty at the University of Minnesota*. Taught *Introduction to Linear Programming*, a Ph.D. level course, for the Operations and Management Science Department at the Carlson School of Management. I got good reports from other faculty and excellent teaching reviews from my ten students.

1994 May through 1995 July, *Placement optimizer for printed circuit board parts for Georgia Tech*. The Universal High Speed Placer, HSP 4790, takes parts from feeder tapes and inserts them onto printed circuit boards *via* a pneumatic turret. Working with Georgia Tech faculty and Ford engineers, I was able to add features to their existing software, streamline its data architecture, and correct some algorithm flaws and modeling errors.

## WORK EXPERIENCE (AFTER HOURS, SUMMER)

1992 May through 1993 April, *Voice mail simulation work for AT&T Bell Labs*. Designed and wrote a detailed simulation of AUDIX voice mail network which enabled users to diagnose locate network congestion.

1985 May through 1991 March, *Design Computation*. Designed and wrote DC/AUTOROUTER, a PC based printed circuit board autorouter that performed competitively in CAD showdowns. The package has seen use on six continents and retains a devoted following.

1980 January through 1983 July, *The Psionic Corporation*. Founded this company, then patented, manufactured, marketed, and distributed the LOCI phonograph tonearm. While running my own company did not make me rich, I learned to deal with a wide variety of craftsmen and vendors, and learned some machining skills.

1979 June through 1979 August, *Xerox PARC Analysis Research Group*.  
Worked for a Summer on techniques for motivating sales force to provide accurate forecasts and simulated a two-priority queue with periodic arrival rates.

## **EDUCATION**

1983 September, Ph.D. in Operations Research from Stanford University

1979 June, M.S. in Operations Research from Stanford University

1978 June, A.B. in Mathematics from Princeton University

## **AWARDS**

Four AT&T Bell Laboratories Individual Performance Awards, 1984-1991.

U. S. Patent 4,192,517 for Articulated Parallelogram Tonearm in 1980.

Graduated *Cum Laude* from Princeton in 1978.

## **COMPUTER EXPERIENCE**

I have extensive computer experience in FORTRAN and C as well as some work in APL, Pascal, SAS, and Oracle. Platforms I have developed for include PC-DOS, Windows 95 and NT, IBM TSO, VAX/VMS, Sun UNIX, IBM AIX UNIX, and LINUX. I also have experience with JCL, IBM ISPF, and X-Window.

## **PERSONAL ACTIVITIES**

When I'm not working on decision support systems, I enjoy flying my airplane, training for my annual marathon effort, and enjoying music both live and from my hifi. Fine music is one of my passions and I have done volunteer work running a chamber music series and have been on the board of directors for a local theater.