

Objective	To obtain a full-time position in engineering and management of computer systems, with emphasis on <ul style="list-style-type: none">• procurement, analysis, and modeling of system requirements,• use of advanced methods, tools, and languages for system design and implementation, followed by delivery.
Education	<p>Ph.D. program, Computational Design, School of Architecture, Carnegie Mellon University, Pittsburgh, PA. <i>May 98 (Expected completion)</i></p> <p>Master of Construction Science and Management, Department of Construction Science & Management, Clemson University, Clemson, SC. <i>Aug 92 (Aug 90 - May 92)</i></p> <p>Bachelor of Architecture, Department of Architecture, Jadavpur University, Calcutta, India. <i>Jun 90 (Aug 85 - Jun 90)</i></p>
Selected Relevant Experience	<p>Engineering Design Research Center and School of Architecture, Carnegie Mellon University, Pittsburgh, PA, <i>Research Assistant</i> <i>Aug 92 - Present</i></p> <p>Designed and implemented a software support tool for architectural programming. Called SEED-Pro, it takes a high level description of a building project, such as building type, site attributes, and budget, and helps the user to generate a consistent architectural program with a well-defined scope. It is a part of a larger project that is developing a software environment to support the early phases of building design (SEED). The work includes:</p> <ul style="list-style-type: none">• extensive analysis and modeling of user requirements collected from interviews with several architectural firms,• information modeling of key aspects of the early phases of building design like specifications and activity-space relationships,• managing the software development process. <p>Developed HeGeL-II, a heuristic layout generation software equipped with a Nonserial Dynamic Programming Algorithm. This was a joint project between the Graduate School of Industrial Administration and the School of Architecture, Carnegie Mellon University.</p> <p>Department of Construction Science and Management, Clemson University, Clemson, SC, <i>Research Assistant</i> <i>May 91 - May 92</i></p> <p>Developed a database application and an assessment process for construction project safety performance. It was sponsored by the Zero Accident Task Force of the Construction Industry Institute. The work includes:</p> <ul style="list-style-type: none">• detail data collection through interviews with multi-disciplinary, on-site project personnel at different levels, like project managers, foremen, and crew members.• development of a data collection procedure and a comprehensive checklist of construction safety techniques.
Computer Skills	<p>Software engineering: advanced knowledge and extensive use of Rumbaugh's Object Modeling Technique (OMT), Jacobson's Object Oriented Software Engineering (OOSE) methodology including use cases, and Design Patterns.</p> <p>Programming/scripting languages: C/C++, Java, HTML, SQL, Scheme (Lisp), FORTRAN, BASIC, [incr]Tcl/Tk.</p> <p>Environments, frameworks, libraries: OMTool, SNIFF, ET++, Microsoft Visual Basic and C++, MFC.</p> <p>Platforms: UNIX (X-Windows and Linux), Microsoft Windows NT/95, Mac OS.</p> <p>User interface development: through behavior modeling, prototyping, and usability engineering.</p> <p>Selected software: Oracle 2000/Designer, Microsoft Office components, AutoCAD, Primavera, Photoshop, PageMill.</p>
Additional Experience	<p>Golder Construction Services, Duluth, GA. <i>Jun 92 - Aug 92</i> <i>Quality Assurance Monitor</i>, site supervision of installation of geosynthetic liner systems for solid waste landfills.</p> <p>Stup Consultants India Pvt. Ltd., Calcutta, India. <i>Jun 89 - Dec 89</i> <i>Intern</i>, worked on the design of pedestrian skywalks in downtown Calcutta.</p>
Selected Publications	<p>"SEED-Pro: Computer Assisted Architectural Programming in SEED." (1995), <i>ASCE Journal of Architectural Engineering</i>. Vol. 1, No. 4, pp. 153-161, (with Ö. Akin, M. Donia, and Y. Zhang).</p> <p>"Navigation within a Structured Search Space in Layout Problems." (1996), <i>Environment and Planning B: Planning and Design</i>, Vol. 23, pp. 421-442, (with Ö. Akin).</p>
Honors & Interests	<p>Member, Sigma Lambda Chi, National Construction Honor Society.</p> <p>Student Representative, MS-PhD Committee, School of Architecture, Carnegie Mellon University. <i>Sep 94 - Aug 96</i></p> <p>Volunteer, Habitat for Humanity.</p> <p>Photography, Squash, Travel, Films, Music, Languages (English, Bengali, Hindi, French).</p>

References, copies of publications, and curriculum vita available on request.