• Thesis

Jan '05 - June '07

Devised algorithms with improved time complexities for the following problems in the plane:

- (i) computing an optimal Euclidean shortest path [1] [slides] ← this work attempts to address Problem 21 of The Open Problems Project,
- (ii) computing an optimal  $L_1$  shortest path [2], and
- (iii) answering visibility polygon queries [3].

[Advisor: Prof. Sanjiv Kapoor]

• Coursework GPA 3.93/4.0

'04

Jan '99 - Aug '01

Design and Analysis of Algorithms, Theory of Computation, Combinatorial Optimization, Approximation Algorithms, Algorithms for Wireless Networks, Science of Programming, Distributed Computing.

M.S. GPA 3.96/4.0

Algorithms, Formal Languages, Computational Geometry, Design of Programming Languages, Compiler Construction, Computer Graphics, Scientific Visualization, Parallel Computing, Computer Networks, Topics in Algorithms [slides]. Prereqs: Discrete Mathematics, Computer Organization, Operating Systems, Introduction to Algorithms.

• Courses assisted as a TA

Discrete Mathematics, Introduction to Algorithms, Design and Analysis of Algorithms, Theory of Computation.

• The slide set used in the oral part of comprehensive exam is here.