The Hong Kong Polytechnic University
Department of Applied Mathematics

Seminar

On

Greedy Approximation with Nonsubmodular Potential Functions

by

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Abstract

There exist many greedy heuristics in the literature. But, not many of them can be successfully analyzed. In fact, although there are many methods to analyze greedy algorithms, almost all of them are suitable only for those greedy algorithms with submodular potential functions. In this talk, we introduce a new method which can analyze a large class of greedy approximations with nonsubmodular potential functions, including some long-standing heuristics for Steiner trees, connected dominating set, and power-assignment in wireless networks.

Date   :   **20 November, 2007 (Tuesday)**

Time   :   **2:30 – 3:30 p.m.**

Venue   :   **Departmental Conference Room HJ610**
                 The Hong Kong Polytechnic University

* * *   ALL ARE WELCOME   * * *