

## **A Model of College Admission Problem with Weak Preferences and Discriminating Quotas**

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### **Abstract**

For the centralized matching in the actual college admission problem (CAP), the discriminating quota often occurs in the departments. The weak preferences and discriminating quotas together with extendable quotas possibly result in the plight - lack of stable matching. In viewing this specific problem, this paper conducts a detailed research into the choice of the model, the development of algorithm, and the exploration of theories, seeking to get a resolution of the plight.

*Keywords:* Stable Matching, Weak Preference, Discriminating Quota, Extendable Quota.