Prof. Bradley Ruffle

Title: Matching in co-operative education programs: An experimental study

Abstract: Most Canadian universities and colleges participate in co-operative education programs whereby each year more than 80,000 co-op students alternate between dedicated forcredit work terms and school terms. Many of these programs utilize a minimum sums algorithm to match students to jobs. We show that this algorithm is unstable. We compare experimentally the properties of this algorithm and theoretically improved variations of it with the deferred acceptance algorithm. While the improved versions of the minimum sums algorithm lead to more truthful reporting of preferences and increase the likelihood of a stable assignment, they all fare worse than the deferred acceptance algorithm. Our data reveal that the superior outcomes associated with deferred acceptance are the result of both the algorithm itself and behavioral responses it elicits.