BESUCHA: Better Course Registration

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INTRODUCTION

- Trinity College's current course registration system enrolls students in classes randomly.
- Our algorithmic system BESUCHA improve a student's chances of being enrolled in their desired courses.

SIGNIFICANCE

The current registration process...

- creates chaos for the Registrar's Office.
- requires last-minute decisions from departments.
- leaves students panicked when they can't enroll in classes they need to graduate.

BESUCHA will...

- improve students' satisfaction with their courses.
- provide the Registrar's Office the needed information to make decisions to add / drop classes.

BESUCHA (Better Enrollment Software Using a Conflict Handling Algorithm) increases the probability of a student being enrolled in their top choice class by an estimated ~29.3%, without sacrifice.

% chance student receives their preferred course

Legend: ■ BESUCHA ■ Trinity's current system
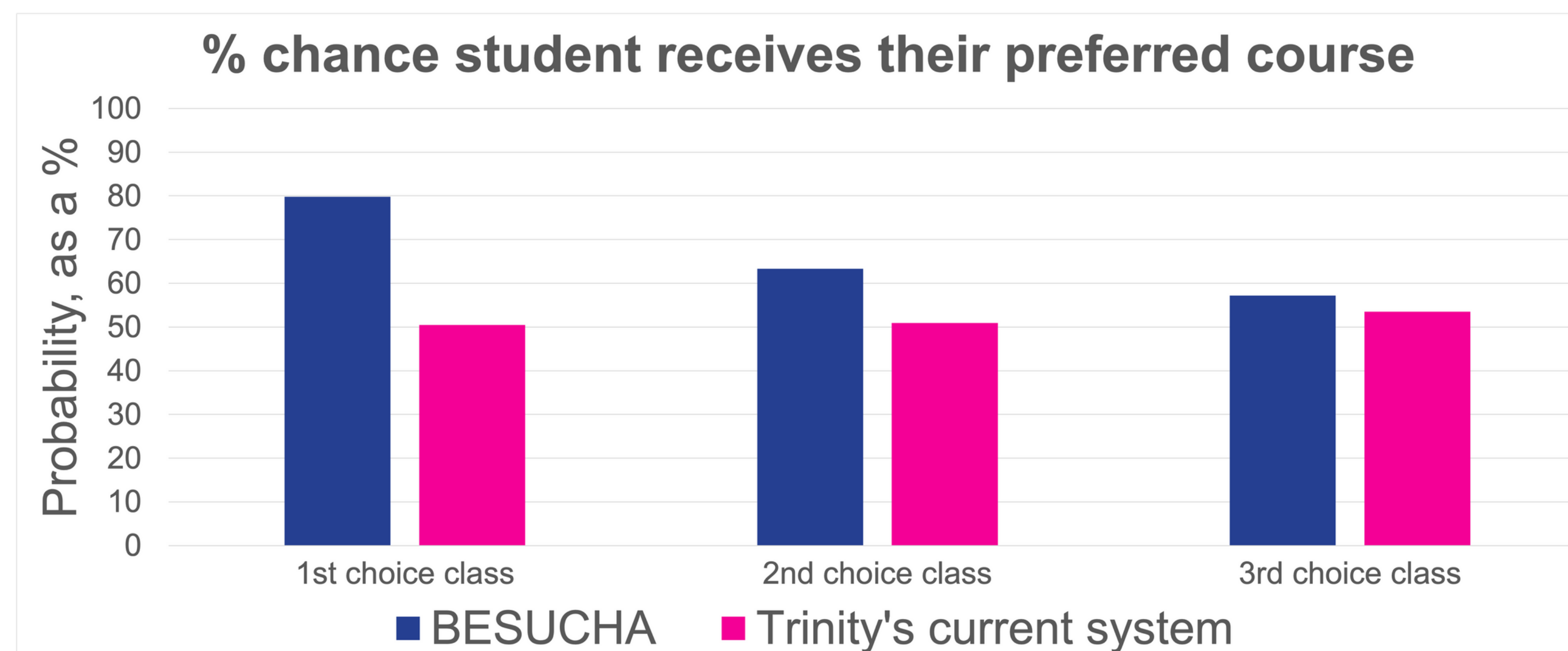
OUR ALGORITHM

Our algorithm determines whether a given student should be enrolled in a high-demand class to maximize a "happiness" score, which is determined by:

1. Student seniority.
2. Whether class is a graduation requirement.
3. Whether student failed to enroll in other classes.
4. Rank on list of preferences.
5. Random number generator, if all else is equal.

OUR VISION

1. Students fill out a form ranking their preferred classes.
2. Registrar's Office uses our desktop app to run our algorithm.
3. Registrar's Office & departments review relevant statistics provided by our application to make decisions about adding or dropping classes, as needed.
4. Students emailed the final list of courses they are enrolled in.

Estimated % Student Happiness

Legend: ■ BESUCHA ■ Trinity's current system