

CISC499 Potential Project

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Project Title: University timetable optimization using genetic algorithm
(Team project with two members)

Description: Course scheduling at a university is a challenging task since many constraints are being considered, including student's time conflict, classroom capacity and availability, and faculty preference. Given a small-scale example of 10 classrooms, 20 time slots, and 8 lectures, there could be as many as $(10 \times 20)^8 = 2.6E18$ possible timetables. In this project, students will be asked to develop a program that optimizes university timetabling using a bio-inspired AI technique, genetic algorithm. Member 1 will be responsible for data acquisition, program interface and input/output design. Member 2 will focus on genetic algorithm design and implementation.