



COLLEGE of ENGINEERING
AND PHYSICAL SCIENCES

SCHOOL OF COMPUTER SCIENCE

MSc Seminar

Thursday June 16, 2022 at 11:30am via Zoom

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Coevolutionary Algorithms: Incorporating phenomena in nature to solve computational problems

Advisor: Dr. Mark Wineberg

Advisory: Dr. David Flatla

Abstract:

Evolution, a common phenomenon in nature, has led to the development of Evolutionary Algorithms for solving computationally difficult problems using heuristic methods. We take a closer look at Coevolutionary Algorithms where we observe the interactions between different populations and make an evaluation based on the interactions between individual members of each population. There are different categorizations of the interactions between various populations, and fitness values are calculated and assigned to each individual. In some cases, a single population holds the solution while the other is simply there to help it reach that solution.