### **Evolutionary Computations Fall 2018**

## **Term Paper/ Project Topics**

**Due Date: 01 Dec 2018** 

Select one of the topics given below and implement/ Write Survey paper. Topics will be assigned on first come first serve basis. Reply on piazza, with the title of your topic and names of group members. A group can have maximum 2 members. Only one group can write/implement on any one topic. Finalize your topics and groups by **12**<sup>th</sup> **of Oct**.

**Note for Survey Paper:** Those who will write survey paper, they should write at least 20 pages (covering at least 30 main papers).

One topic can be selected by two groups, but there surveys should be different, don't share any material.

#### **Topics**

**Survey Papers:** (For survey papers include the latest papers and (plagiarism) similarity index should be less than 10%. Attach the plagiarism report with the survey. You can write survey paper of last 10 to 15 years but try to include more papers from last 5 years.)

- 1. Survey: Evolutionary Computation in Information Retrieval
- 2. A survey of Performance metrics for Multi and Many objective Optimization
- 3. A survey of multi and many objective evolutionary algorithms in Bioinformatics
- 4. A survey of multi and many objective evolutionary algorithms in Internet of Things (IoT)
- 5. A survey of multi and many objective evolutionary algorithms in Search based Software Engineering (SBSE)
- 6. A survey of multi objective Genetic Programming

Note: You can also propose your own topic, but that should be approved before you proceed working on it. You have to write on that topic for which you don't find any good survey paper in let say last 5 years.

#### **Implementation Papers:**

select any good EC related paper

- implement existing paper
- propose and implement your method to improve the existing results
- You can discuss idea with me. I have some ideas.
- You need approval for the selected topic.

# Research (Implementation) Paper Deliverables

Deliverables	Due Date	Weightage (marks)
Related work,	Nov 12, 2018	46%
Abstract and Introduction		
Proposed Method,	Dec 01, 2018	54%
Results,		
Conclusion		

# Survey Paper Deliverables

Deliverables	Due Date	Weightage (marks)
Complete 1 <sup>st</sup> draft	Nov 20, 2018	60%
Final draft	Dec 01, 2018	40%

Note: On  $1^{st}$  draft I will give comments and you need to improve it as submit your final draft.

**Note:** When using another author's intellectual property (from primary or secondary source material), it is essential that you properly cite your source. Giving credit not only benefits your credibility as an author, but will also help you avoid plagiarism. Be sure to carefully document all the necessary citation information for your sources while researching to make the process much easier.