Abstract

Job Shop is a crucial problem in the manufacturing industry. Companies can reduce production costs and improve efficiency by creating a schedule with all the job processing time most minimum. However, job shop is a combinatorial optimization problem with a solution space is very large and difficult to resolve.

Based to this, the purpose of this final task is to use the algorithm River Formation Dynamics (RFD) which is suitable for combinatorial problems that can generate optimum solutions. The results showed River Formation Dynamics (RFD) can provide an average accuracy above 80% for all datasets are used. So River Formation Dynamics (RFD) algorithms can be one option to solve Job Shop problem.

Keywords: Job Shop, River Formation Dynamics