Informatic Institute of Technology

Department of computing

Module: Algorithms: 5SENG002C

Degree Program – BEngSE

Tutorial group – Group E

Module leader – Mr. Achala Aponso

2nd year – Semester 02

Coursework 01

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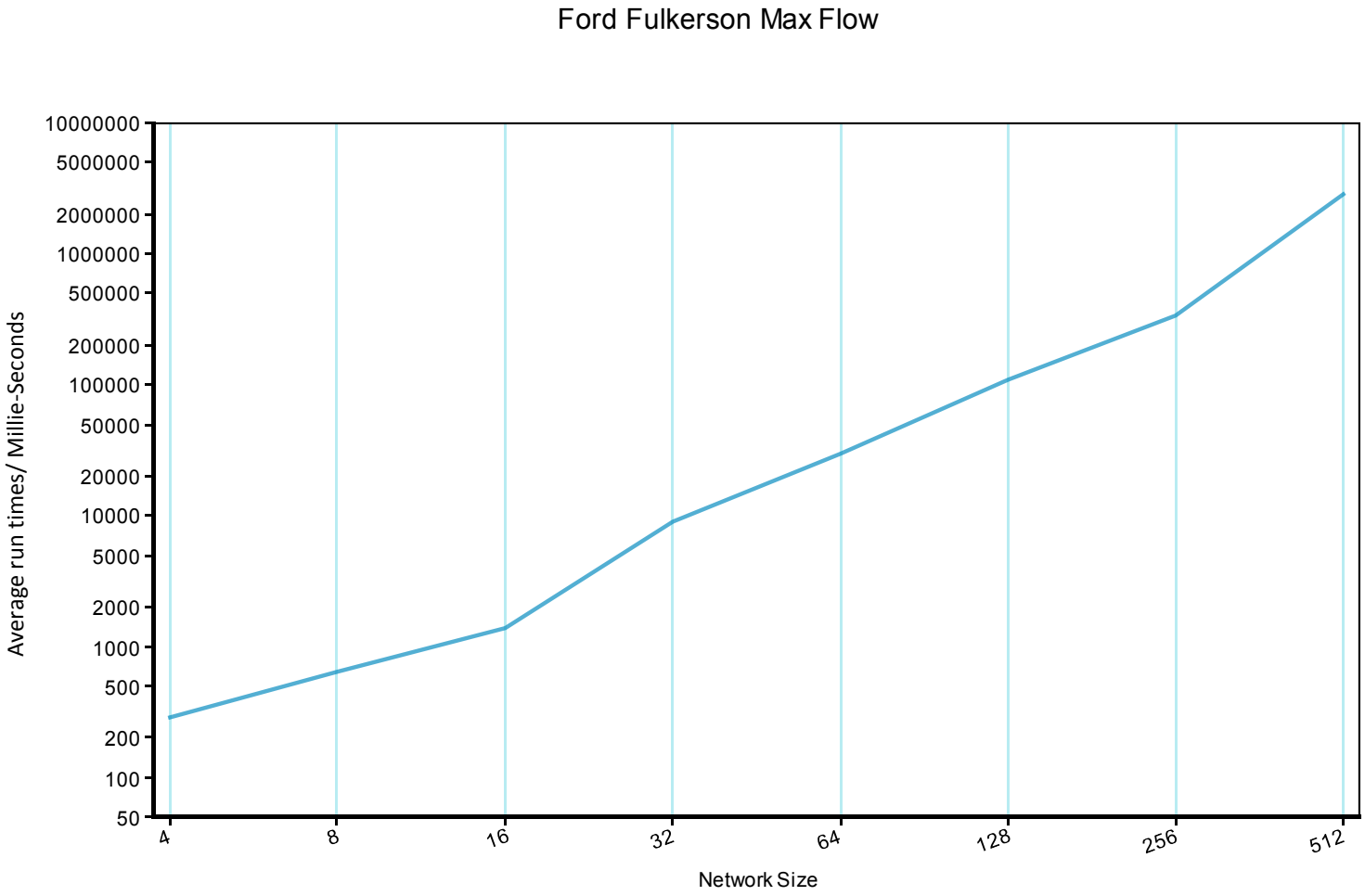
Network Size	Average run times/ Millie-Seconds
4	287.109
8	642.089
16	1600.045
32	9006.835
64	29772.949
128	109554.199
256	339269.287
512	2868645.019



According to above results Finding the augmenting path inside the while loop takes $O(V + E^f)$ where E is the set of edges in the residual. This can be simplified to $O(E^f)$. So, the runtime of Ford-Fulkerson is $O(E.|f^*|)$ where $|f^*|$ is the maximum flow.