**Cover Letter**

May 31, 2021

Dear Editor,

We are submitting a manuscript for consideration of publication in Computer Communications Journal. The title of the manuscript is **'Versatility in Controller Placement Approaches through Graph Theory and Greedy Search Techniques'.** The paper is not published anywhere else or is not under review at this moment.

The Controller Placement Problem (CPP) in Software Defined Networks (SDN) is an interesting field of research. Currently researchers are working on clustering the SDN network to place multiple controllers instead of one. This is NP-Hard as there are more than one parameters that need to be optimized like network scalability, reliability, security, cost and energy consumption, network traffic etc. With a target to handle so many parameters, this paper uses an algorithm to place controllers considering latency and dynamically change their assignments based on loads as well.

The major contributions of the paper are:

1. We give several algorithms which work with weighted links between switches, thus allowing us to create clusters based on network traffic, bandwidth, transmission rate, etc., which are essential in determining the condition of a network. They further rearrange the network dynamically to maintain the optimum network throughput.
2. Our proposed algorithms cluster SDN networks in polynomial time complexity.
3. Our algorithms are both static and dynamic traffic-aware. They consider latency and traffic while clustering before placing controllers (Static) and can also re-cluster the switches based on existing traffic after placing the controllers (Dynamic).

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Thank you very much for your consideration.

Yours Sincerely,

On behalf of the authors,

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