

## # Prove SFQ IS THE culprit

---

### 1993 Report of NASA ON SFQ

---

This report covers a series of experiments performed on DARTnet evaluating the behaviour and performance of SFQ against a FIFO queueing discipline.

Table to demonstrate SFQ's performance :

Based on	SFQ	FIFO
1)Fair utilization of available resources	BETTER	
2)Starvation prevention	BETTER	
3)Graceful degradation under overload conditions		BETTER
4) Resource usage.		BETTER

#### CONCLUSION :

SFQ is an efficient queueing discipline for providing equal access to the available bandwidth. The isolation of the streams helps to ensure that no stream receives more than its fair share and that each stream degrades gracefully as more streams are added. SFQ also seems to possess very good scaling properties; but more work needs to be done to verify this. In particular, the choice of hash function and seed perturbation technique needs further investigation. The current choices may prove inadequate in a more stressful environment.

Link to the pdf :

[https://drive.google.com/file/d/1MFPhsAAmQTB9vGERyWk7tdVXFPVw8yG\\_/view?usp=drive\\_link](https://drive.google.com/file/d/1MFPhsAAmQTB9vGERyWk7tdVXFPVw8yG_/view?usp=drive_link)

---

### 2014 GSOC REPORT

---

Piz refer the 7<sup>th</sup> heading of the content .

Link of the report :

[https://www.nsnam.org/wiki/GSOC2014Bufferbloat#Understanding\\_bufferbloat\\_through\\_simulation\\_in\\_ns-3](https://www.nsnam.org/wiki/GSOC2014Bufferbloat#Understanding_bufferbloat_through_simulation_in_ns-3)

---

### SFQ CODE IMPLEMENTATION

---

Link of the code and explanation :

[https://drive.google.com/file/d/1naTPL8dsdcJ4DiVMji2b72CNu3fuWTai/view?usp=drive\\_link](https://drive.google.com/file/d/1naTPL8dsdcJ4DiVMji2b72CNu3fuWTai/view?usp=drive_link)

# Implement MLFQ and prove it can be a solution

Link of the code and explanation :

[https://drive.google.com/file/d/1Ya0dhQPuRiCzrHtbD46jnre81Vg\\_IURo/view?usp=drive\\_link](https://drive.google.com/file/d/1Ya0dhQPuRiCzrHtbD46jnre81Vg_IURo/view?usp=drive_link)