

Subject: Re: RESUME points verification  
From: D Manjunath <dmanju@ee.iitb.ac.in>  
Date: 20/08/19, 12:29 AM  
To: Anuraag Tummanapally <173079001@iitb.ac.in>

Verified

On 20-Aug-2019, at 12:16 AM, Anuraag Tummanapally  
<[173079001@iitb.ac.in](mailto:173079001@iitb.ac.in)> wrote:

Dear Sir,  
Please verify my RESUME points.

**1. M.Tech Project:** OpenFlow Router with eBPF Forwarding Engine (Duration: May'19 - Present)

**Objective:** Create a fast data plane forwarding device for small to medium networks.

**Completed work:** Put together the functional requirements of controller and switch.

**Ongoing & future work:**

- Using POX controller to communicate with OpenVSwitch via OpenFlow protocol.
- Using eBPF in kernel space as backend for fast packet forwarding, and less number of packet copies.
- Implementing a level-compressed TRIE for fast lookup.
- Porting the entire system to a SPARC processor on FPGA, as a prototype for IoT deployment
- Benchmark testing of the system

**2. Seminar:** Open Source Router (Duration: Jul'18 - Dec'18 )

- Studied Click Modular Router, Extended Berkely Packet Filter, Network Processor Architecture and Software Defined Networking (SDN)
- Implemented a basic version of Click modular router, to work as an Ethernet switch.

**3. Teaching Assistant:** Communication Networks (IIT Bombay, IIT Dharwad) (Duration: Jan'19 - Apr'19)

- Created and evaluated 7 lab experiments, based on socket programming.
- Work also involved traveling, setting up lab experiments and evaluations at IIT Dharwad.

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Thanks and Regards,  
Anuraag Tummanapally  
M.Tech RA