Nandita G

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Education

M.Tech in Computer Science and Engineering 2016 - 2018
National Institute of Technology Karnataka, Surathkal, India
- CGPA of **7.61**/10 (June 2017)

B.Tech in Computer Science and Engineering 2010 - 2014
Amrita School of Engineering,Bangalore,India
- CGPA of **8.17**/10

High School - Vidya Vikas Matriculation Higher Secondary School (Stateboard) - 88% 2008 - 2010
Secondary School - Christ The King Matriculation School - 95% 2006 - 2008

Experience

Internship in NITK May, 2017 - July, 2017
Implementation of CHOKe in ns-3 : CHOKe (CHOose and Keep for responsive flows, CHOose and Kill for unresponsive flows) is an AQM that punishes flows which send more packets than their fair share to a router.CHOKe is implemented in ns-3 and validated using test cases.

Professional Experience
Worked as Programmer analyst at Cognizant Technology Solutions from Feb 5, 2015 to July 15, 2016. Worked on developing a website internal to CTS using .NET.

Technical Skills

Areas of interest - Databases, Networks
Languages - C, C++, Java, SQL
Web Technologies - HTML, CSS, Javascript
Tools/Frameworks - SQLServer, Git, RStudio(Basic)
Application Software - ns-3, MATLAB (Basic)

Projects

All projects available on git : https://github.com/gnandita

- **Implementation of TCP-LP in ns-3** : TCP-LP provides low priority service so that only excess bandwidth is utilized.This is implemented in ns-3 with examples and testcases.The code is submitted for review to ns-3.
- **Implementation of SRED in ns-3** : Stabilized Random Early Detection is an Active Queue Management algorithm which drops the packets using a load-dependent probability when a buffer appears congested. It stabilizes the buffer occupation independent of the number of active connections.This is implemented in ns-3 and validated using test cases.
- **Implementation of ELN in ns-3**(ongoing) : Explicit Loss Notification (ELN) is a mechanism which tells the sender whether the loss of a packet is unrelated to network congestion.
- **Implementation of Modified Canny Edge detection algorithm** : Implemented the paper "An Improved Canny Edge Detection Algorithm" which details about a modification of Canny edge detection algorithm to reduce the sensitivity of the edge detection algorithm to noise and to preserve weak edge information also.

Extra-curricular Activities

- Volunteered and served for Mata Amritanandamayi's 60th birthday.
- Awarded by Kanchi Shankara Mutt, ARR trust Kumbakonam, Tanjore for getting school first in Tenth public exam, Tanjore.
- Participated in Speech Competitions conducted by Sri Ramakrishna Math,Chennai.
- Won prizes for quiz and speech competitions at school level