Balakrishnan Vasudevan

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EDUCATION

UNIVERSITY OF CALIFORNIA
MS in Electrical and Computer Engineering
Dec 2015 | Santa Barbara, CA
Cum. GPA: 3.7

ANNA UNIVERSITY
BE in Electronics and Communication Engineering
Apr 2011 | Chennai, India
GPA: 83%

LINKS

Github:// BalakrishnanVasudevan
LinkedIn:// balakrishnanvasudevan
Quora:// Balakrishnan-Vasudevan

COURSEWORK

GRADUATE
Advanced Topics in Networking
Multimedia Compression
Signal Compression
Mobile Embedded Systems
Advanced Computer Architecture
Error Correcting Codes
Cryptographic Engineering
Intro to CS, Problem Solving with Computers (Reader)

UNDERGRADUATE
Computer Networks
Mobile Communication
Microwave Communication
Digital Communication
High Speed Networks
Digital Signal Processing

SKILLS

PROGRAMMING
Shell • Python • LaTeX
Familiar:
Ruby

NETWORK HARDWARE
Juniper • SmartEdge • Cisco • Huawei • Arista • Extreme Networks

EXPERIENCE

APPFOLIO INC. | Web Operations Engineer
Feb 2016 onwards | Goleta, CA

- Handling the operation of the monitoring system for web operations.
- Streamlined the alert thresholds and escalation chains in order to ensure minimal alert fatigue and seamless integration with the paging system.
- Working on release management and systems administration for SaaS operations.

APPFOLIO INC. | Software Engineering Intern
Jun 2015 - Sep 2015 | Goleta, CA

- Worked with the Web Operations team on persistent issues with the data center network like port flaps and packet discards.
- Improved visibility for monitoring link failures and status changes.

ERICSSON GLOBAL SERVICES (INDIA) PVT. LIMITED | Senior Engineer - IP/MPLS
Jul 2011 - Sep 2014 | Chennai, India

- Led a team of three engineers handling the design and optimization of Microwave, Optical and Ethernet based transport networks for 2G, 3G and 4G services in India and Africa involving Juniper, SmartEdge and Huawei routers.
- Reduced time to carry out performance monitoring activities on the network by 90% using bash and VB scripting.
- Designed the transport network for 6 cities in South Africa to support more than 2000 3G base stations.
- Set a network performance benchmark by troubleshooting routing protocols like OSPF, BGP and MPLS, ensuring minimal latency, packet drops, errors and congestion in the backbone network.

PROJECTS

Performance of TCP variants Reno, NewReno and Vegas under various load conditions and queuing algorithms using NS2 (2014).

End to end Internet measurements between 60 PL nodes using PlanetLab (2014).

Application of TCP variants NewReno and CUBIC and their impacts on the performance of LTE networks (2015).

M.A.R.S. - Mobile Augmented Reality Based Social networking, augmenting a user's status message onto an image using extracted feature points (2015).

Tutorial on generation and verification of Cryptographically Generated Addresses (CGA) (2015).

Evaluation of optimal compression schemes for radiological images for transmission using low-bandwidth networks (2015).

Tutorial on the use of Elliptic Curves (ECDH, ECDHE and ECDSA) in Transport Layer Security (TLS) (2015).

AWARDS

2013	Ericsson Ace Award	Transport network design for South Africa
2012, 2013	Star Performer Award	Initiation of new performance-monitoring activities