AKHILESH THYAGATURU

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Education:

Doctor of Philosophy (PhD) in Electrical Engineering GPA 4.0 **May'17**
Advisor: Martin Reisslein
Thesis: Software defined applications for cellular and optical networks
Arizona State University, Tempe

Masters of Science (MS) in Electrical Engineering **May'13**
Major: Signal Processing and Communications
Arizona State University, Tempe

Bachelor of Engineering (BE) **Jun'10**
Major: Electronics and Communications
Visvesvaraya Technological University, India

Work Experience:

Sr. Software Engineer, Intel Corporation, San Diego, CA **May'17 –**
Platform software development for cellular modems in cellular R&D group.

Graduate Technical Intern, Intel Corporation, San Diego, CA **May'16 – Jan'17**
Several roles related to software integration and methodologies in the cellular R&D group.

Engineer, Qualcomm Technologies Inc., San Diego, CA **May'13 – Jan'15**
Protocol development and verification of LTE.

Lecturer, Siddaganga Institute of Technology (SIT), India **Jan'11 – May'11**
Taught coursework, computational methods, to design a mathematical model for a given physical problem within the context of linear algebra. Also taught, digital signal processing and its applications for the sophomore class.

Intern, Hindustan Aeronautics Limited, Bangalore, India **Aug'09– Jun'09**
Implemented signal processing algorithm in C using Linux driver concepts for an embedded processor in application to automatic direction finder and missile launching systems.

Publications:

1) Akhilesh Thyagaturu, Alharbi, Ziyad, and Martin Reisslein. "R-FFT: Function Split at IFFT/FFT in Unified LTE CRAN and Cable Access Network.", accepted, IEEE Transactions on Broadcasting, 2017.

2) Alharbi, Ziyad, Akhilesh Thyagaturu, Martin Reisslein, Hesham ElBakoury, and Ruobin Zheng. "Performance Comparison of R-PHY and R-MACPHY Modular Cable Access Network Architectures". IEEE Transactions on Broadcasting, 2017.

3) Akhilesh Thyagaturu, Anu Mercian, Michael P. McGarry, Martin Reisslein, and Wolfgang Kellerer. "Software defined optical networks (SDONs): A comprehensive survey." IEEE Communications Surveys & Tutorials 18, no. 4 (2016): 2738-2786.

4) Thyagaturu, Akhilesh S., Yousef Dashti, and Martin Reisslein. "SDN-Based Smart Gateways (Sm-GWs) for Multi-Operator Small Cell Network Management." IEEE Transactions on Network and Service Management 13.4 (2016): 740-753.

5) Akhilesh Thyagaturu, Longhao Zou, Gabriel-Miro Muntean, and Martin Reisslein, "SDN based QoS Adaptive Multimedia Mechanisms and IPTV in LayBack", IEEE Communication Frontiers, March 2016.

Patent Disclosures:

US Patent, "Systems and Methods for a Layered SDN-Based Backhaul Architecture for Small Cells", Akhilesh Thyagaturu and Martin Reisslein, App. No. 62/262,504.

US Patent, "Systems and Methods for a Smart Gateway SDN-Based Backhaul Architecture for Small Cells", Akhilesh Thyagaturu and Martin Reisslein, App. No. 62/318,410

US Patent, "System and Methods to Provide Computing as a Networking Service for Wireless Infrastructures to enable LTE

Wi-Fi Coexistence", Akhilesh Thyagaturu, Lorenzo Ferrari, Martin Reisslein, and Anna Scagoline, ASU Ref. No. M17-136P.

US Patent "Infrastructure Sharing and QAM Symbol Caching for FFT-split LTE CRAN and DCCAP DOCSIS Cable Networks", Akhilesh Thyagaturu and Martin Reisslein, ASU Ref. No. M17-172P.

Programming Languages: C, C++, Python, Perl, MATLAB

Related Coursework:

Advance Computer Networks, Computer Networks, Broadband Networks, Wireless Networks, Digital Communications, Wireless Communications, Random Signal Theory, Time Frequency Analysis, Detection and Estimation Theory, Multidimensional Signal Processing and Digital Signal Processing.

References:

Martin Reisslein
Professor,
Arizona State University
Tempe, AZ-85287
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Lucas Bajoun
Sr. Staff Engineer/Manager
Qualcomm Technologies Inc.
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