

Prof. Dr. Nen-Fu HUANG 黃能富



Contact Information

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College of Electrical Engineering and Computer Science
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Education / Positions

Education

Ph.D. in Computer Science, National Tsing Hua University, Taiwan, November 1986.

M. S. in Computer Science, National Tsing Hua University, Taiwan, June 1983.

B. Eng. in Electrical Engineering, National Cheng Kung University, Taiwan, June 1981.

Current Position

Dean, College of Electrical Engineering and Computer Science, National Tsing Hua University, Taiwan (2016/8 – present)

Distinguished Professor, Department of Computer Science, National Tsing Hua University, Taiwan. (2008/8- present)

eMemory Academic Chair Professorship, National Tsing Hua University, Taiwan (2016/8- present)

Employment

CEO/Chairman, Broadweb Corp., Hsin-Chu Science Park, Taiwan, 2001-2006 (acquired by TrendMicro in 2013)

Founder/Chairman, Nextream Corp, Taiwan, 2008- (www.sharecourse.net)

Director, Computer and Communication Research Center (CCRC), National Tsing Hua University, Taiwan, 2015-2016

Director in Board/Chief Technical Advisor, Acute Communication Inc, San Jose, USA, 1997-2005.

Chairman, Department of Computer Science, National Tsing Hua University, Taiwan. 1998-2001

Professor, Department of Computer Science, National Tsing Hua University, Taiwan. 1994-2008

Associate Professor, Department of Computer Science, National Tsing Hua University, Taiwan, 1986 - 1994

Research Interested Topics

General Interests

- * Network Security
- * High Speed switches/routers
- * Wireless Network
- * Internet of Things (IoT) networks

Special Interests

- * Deep packet inspection Technologies
- * High-Speed Switching and Routing Technologies
- * Layer-7 content inspection Technologies
- * IoT networking and applications
- * MOOC Learning behavior analyzing Technologies

Recent Key Publications

- **Nen-Fu Huang**, Yen-Ming Chu and Hsien-Wen Hsu (2011). Graphics Processor-based High Performance Pattern Matching Mechanism for Network Intrusion Detection,

Intrusion Detection Systems, Pawel Skrobaneck (Ed.), ISBN: 978-953-307-167-1, InTech, 2011. Available from: <http://www.intechopen.com/articles/show/title/graphics-processor-based-high-performance-pattern-matching-mechanism-for-network-intrusion-detection>

- Yi-Hsuan Feng, **Nen-Fu Huang**, Yen-Min Wu, "Efficient and Adaptive Stateful Replication for Stream Processing Engines in High-Availability Cluster", **IEEE Transactions on Parallel and Distributed Systems** (SCI), November 2011, pp.1788-1796.
- Yung-Cheng Chu and **Nen-Fu Huang**, "An Efficient Traffic Information Forwarding Solution for Vehicle Safety Communications on Highways", **IEEE Transactions on Intelligent Transportation Systems** (SCI), Vol.13, Issue 2, June 2012, pp. 631-643.
- **Nen-Fu Huang**, Gin-Yuan Jai, Han-Chieh Chao, Yih-Jou Tzang, and Hong-Yi Chang, "Application Traffic Classification at the Early Stage by Characterizing Application Rounds," **Information Sciences** (SCI), Vol.232, May 2013, pp. 130-142.
- Yen-Ming Chu, **Nen-Fu Huang**, and Sheng-Hsiung Lin, "Quality of Service Provision in Cloud-based Storage System for Multimedia Delivery," **IEEE System Journal** (SCI), August 2013
- Hong-Yi Chang, **Nen-Fu Huang**, Yih-Jou Tzang, and Yuan-Wei Lin, "A Novel Bandwidth Management System for Live Video Streaming on Public-Shared Network," **IEEE Transactions on Vehicular Technology**(SCI), Vol.62, No.8, October 2013, pp. 3848-3862.
- Yung-Cheng Chu and **Nen-Fu Huang**, "A Burst Effort Broadcast Approach of MPEG-4 Video Transmission for Inter-Vehicle Communication", **IEEE Transactions on Intelligent Transportation Systems** (SCI), Vol.14, No.4, December 2013, pp. 1839-1848.
- Wen-Yen Tsai, **Nen-Fu Huang**, "qcAffin: A hardware topology aware interrupt affinitizing and balancing scheme for multi-core and multi-queue packet processing systems", **IEEE Transactions on Parallel and Distributed Systems** (SCI), Vol. 27, No.6, 2016, pp.1783-1795.