



Dr. Passakon Prathombutr

Senior Executive Vice President/CTO

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Dr. Passakon Prathombutr graduated the interdisciplinary Ph.D. program in Software architecture and Computer networking from the University of Missouri, Kansas City. He was in the team that connected the first Internet leased line to the country in 1991 when he was a student in Chulalongkorn university. After graduated he served as a researcher at National Electronics and Computer Technology Center or NECTEC. When he became the director of Next Generation Internet Laboratory in NECTEC, he founded the Thai IPv6 association and while he served as the director of Intelligent Transport System program, he founded the Thai ITS association. In 2010, he moved to National Science and Technology Development Agency or NSTDA to serve as the director of the Service & Data Innovation program. Besides, he was the co-founder of Thai Intelligent Traffic Information Center Foundation (iTIC) and the CCTV Consortium.

At present, he is the Senior Executive Vice President of Digital Economy Promotion Agency or depa, to drive mega projects including the smart city project and the IoT institute. For international position, he is the editor-in-chief of the International Journal of Intelligent Transportation System Research, Springer.

Affiliation

- 2017-present Senior Executive Vice President
Digital Economy Promotion Agency or depa
- 2010-2017 Senior Program Director, NSTDA
- 2012-2017 President of ITS Thailand
- 2010-2012 Director of Information Communication and Computing Research Unit,
NECTEC
- 2006-2010 Director of Intelligent Transport System Program, NSTDA
- 2003-2006 Director of Next Generation Internet Laboratory, NECTEC
- 1993-2003 Researcher, Network Technology Laboratory

Education

- 2000-2003 Ph.D. in Software Architecture and Computer Networking,
University of Missouri at Kansas City USA
- 1997-1999 Master of Computer Science, Oklahoma State University, USA
- 1990-1992 Master of Computer Science, Chulalongkorn University Thailand
- 1986-1989 B.Sc. in Physics, Chiang Mai University, Thailand

Previous Projects

- Digital Base-map
- TIS (Traveller Information System)
- Next Generation Internet /IPv6
- VoIP, Smart IVR
- Network Security
- Traffic Engineering
- Thai Traffic Data Center
- ThaiSarn (Research and Education
Network of Thailand) www.thaisarn.net.th
- SchoolNET www.school.net.th
- Optical Network Design for Dynegy
Company (USA)
- ThaiSarn-3
- ThaiREN (Thailand Research and
Education Network)
- Thailand IPv6 Testbed
- Internet Information Research (IIR) –
Traffic monitoring and Speed Test
- Intelligent Transportation System
- Mail-Talk (Asterisk IVR interactive with
SMTP)
- Driver Behavior Detecting/Monitoring
- Traveler Information System
- Road Traffic Management and Control

Current Research Project

- Smart City project
- Digital Economy Strategic Plan
- Vehicle Communication (V2X)
- Service Research Innovation

Committee:

- Executive Board committee of ASEAN Transportation Research Society (ATRANS)
- Executive Board committee of Department of Special Investigation (DSI)
- Editor-in-Chief, the International Journal of Intelligent Transport System Research.
- Technical Program Committee, ICCVE 2013 (2013 International Conference on Connected Vehicles & Expo) in Las Vegas, 2-6 December 2013.
- Technical program committee, Asia Pacific Automotive Conference 17 (APAC17) 2013 Bangkok Thailand.
- Technical program committee, International Conference on Computing and Information Technology (IC2IT) 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017
- Technical program committee for International Workshop on Social Networks and e-Services (SNeS-2013)
- Steering Committee, ITST 2010, Kyoto Japan
- Standardization Committee member, National Telecommunication Commission
- Editorial board of International Journal of ITS Research, 2009-2013
- Steering Committee, ITST 2009, Lille, France
- Reviewer NCCIT 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017
- Organizing committee chair, AP ITS Forum and Exhibition 2009
- Reviewer IEEE ECTI 2008, 2009, 2010, 2011, 2012
- Reviewer Joint Conference on Computer Science and Software Engineering JCSSE 2008
- Technical Program Chair of ITS Telecommunications, ITST 2008

- Technical Committee of IEEE ICCCN'04 conference
- Technical Committee of IEEE ICCCN'05 conference
- Technical Committee of IEEE ICCCN'06 conference
- Technical Committee of IEEE ICCCN'07 conference
- Technical Committee of IEEE ITST 2007
- Technical Committee of IEEE ECTI Conference 2007
- Technical Committee of NAC'05, 06, 07
- Vice President ITS Thailand (as of Feb 2008)
- Vice President Thailand IPv6 Forum (Association)
- Committee of Thai Research and Education Network Association
- Secretariat of Thai ITS Forum
- ITS Cluster manager of NSTDA
- NGI Cluster manager of NSTDA
- APAN-TH, SIP Working Group Chair
- Committee of Q-Ti Forum (Thai Quantum forum)
- Reviewer KMITL Science Journal 2007
- Reviewer APCC 2007
- Keynote Speaker and Reviewer NCCIT 05, 07

Publications:

Marut Buranarach, Thepchai Supnithi and Passakon Prathombutr, "An Ontology-based Knowledge as a Service Framework: A Case Study of Developing a User-centered Portal for Home Recovery", ACIS-SS 2012.

Prathombutr, P.; Pattara-atikom, W.; Chaovalit, P. , "Traffy Social Eyes: The Traffic CCTV Service Platform", SRII Global Conference (SRII), 2012 Annual, 2012, pp 869 – 874

Chotimongkol, A.; Thatphithakkul, N.; Prathombutr, P., "Smart IVR Service Platform", SRII Global Conference (SRII), 2012 Annual, 2012 , pp 426 – 434

Raphiphan, P.; Prathombutr, P.; Zaslavsky, A.; Meesad, P. ,”Real time traffic congestion degree computation for minor sensorless roads using cost efficient context reasoning”

Intelligent Transportation Systems (ITSC), 2010 13th International IEEE Conference on, 2010 , pp 1741 - 1746

P. Raphiphan, A. Zaslavsky, P. Prathombutr and P. Meesad, “Overcoming Uncertainty of Roadside Sensors with Smart Adaptive Traffic Congestion Analysis System”, 2009 IEEE Intelligent Vehicle Symposium, June 3-5, 2009, Xian, China, 2009 , pp 1045 – 1050

P. Raphiphan, A. Zaslavsky, P. Prathombutr and P. Meesad, “Context Aware Traffic Congestion Estimation to Compensate Intermittently Available Mobile Sensors”, 2009 Tenth International Conference on Mobile Data Management: Systems, Services and Middleware (MobiUS-09), 2009 , pp 405 - 410

W. Keardsri, Y. Teng-amnuay and P. Prathombutr, “Presenting Privacy Tree Structure for IP Address Anonymization Based on Privacy Levels”,13th International Annual Symposium on Computational Science and Engineering (ANSCSE 13), Bangkok Thailand, March 2009.

W. Keardsri, Y. Teng-amnuay and P. Prathombutr, “Defining Privacy Levels for IP Address Anonymization”,13th International Annual Symposium on Computational Science and Engineering (ANSCSE 13), Bangkok Thailand, March 2009.

P. Raphiphan, W. Pattara-Atikom and P. Prathombutr, “A Survey of Travel Time Estimation Techniques Based on Cellular Probes”, NSTDA Annual Conference 2007, June 2007, pp 481-489.

P. Raphiphan, A. Zaslavsky, W. Pattara-Atikom and P.Prathombutr, “Distributed Context Aware System for Travel Time Estimation Based on Cellular Probes in Metropolitan Environment”, ECTI-CON2007 Proceedings, May 2007, pp 589-592.

Passakon Prathombutr, Jerry Stach and EK Park, *An Algorithm for Traffic Grooming in WDM Optical Mesh Networks with Multiple Objectives*, Journal of the INFORMS Section on Telecommunications, Springer MA, March 2005, pp 369-386.

Sung Woo Tak; Prathombutr, P.; Jongwook Jang; Eun Kyo Park, *A restoration software framework for survivable WDM optical networks*, Computer Communications and Networks, 2004. ICCCN 2004. Proceedings. 13th International Conference on, 11-13 Oct. 2004, pp 11 – 16.

Prathombutr, P.; Stach, J.; Park, E.K.; Sung Woo Tak; *Model for series of reconfigurations in wavelength-routed optical networks*, Computer Communications and Networks, 2004. ICCCN 2004. Proceedings. 13th International Conference on 11-13 Oct. 2004 Page(s):437 – 443.

Passakon Prathombutr, Jerry Stach and EK Park, *An Algorithm for Traffic Grooming in WDM Optical Mesh Networks with Multiple Objectives*, NECTEC Technical Journal, Vol. 4, No. 15, Nov 203 – Oct 2004, pp 555 - 563.

Prathombutr, P.; Stach, J.; Park, E.K.; *An algorithm for traffic grooming in WDM optical mesh networks with multiple objectives*, Computer Communications and Networks, 2003. ICCCN 2003. Proceedings. The 12th International Conference on 20-22 Oct. 2003, pp 405 – 411.

Prathombutr, P.; Park, E.K, *Multi-layer optical network design based on clustering method*, Computer Communications and Networks, 2002. Proceedings. Eleventh International Conference on, 14-16 Oct. 2002, pp 466 471.

Sung Woo Tak; Prathombutr, P.; Park, E.K.; *An efficient technique for a series of virtual topology reconfigurations in WDM optical networks*, Computer Communications, Vol 30, Issue 6, 26 March 2007, pp 1301-1314.
