Antonio Kung

Trialog
25 rue du Général Foy. 75008 Paris

Tel : 33 (0)1 44 70 61 00
Fax : 33 (0) 1 42 94 80 64
email : antonio.kung@trialog.com

-

Education

- Engineering degree, Ecole Centrale des Arts et Manufactures, 1979.
- Master of science, Harvard University, 1980 (French government scholarship).

Industry Experience

1987-Date: Co-founder, Chief Technology Officer, TRIALOG

- Coordinator of the PARIS and PRIPARE projects on privacy
- Privacy-by-design ambassador (www.privacybydesign.ca/index.php/ambassador/antonio-kung/)
- Coordination of European projects in the following area: home networking, automotive electronics, security in embedded systems, software engineering for embedded systems, pervasive computing.
- Coordinator of standardisation activities in home networking (KNX/EHS).
- Coordination of technology work related to home networking (e.g. UpnP, HAVI, KNX/EHS, OSGi, Zigbee), to operating systems and platforms (e.g. OSEK-VDX real-time operating system) and to model-based tools (MyArtifacts)

Expertise actitivies

- Expert for the commission and the French ministry on embedded systems and home networking area since 1985.
- Speaker in numerous seminars on real-time and embedded systems.

1980-1987 Project manager, GSI-Tecsi (now Steria)

Head of the Real-Time group. Was in charge of the development of the RealTime Craft line of products on real-time kernels, including customized versions for avionics and aerospace applications (French CNES). Was a member of the French initiative for real-time kernel standardisation (SCEPTRE).

Academic Involvement

- Lecturer American University of Paris since 1984. Security and trust, networking, algorithms.
- Lecturer Ecole Centrale Pékin since 2010. Architecture of embedded systems
- Lecturer Conservatoire des Arts et Métiers (CNAM) since 2007. Home networking
- Lecturer Ecole Centrale Paris from 1990 to 2009. Graduate level course on real-time systems.
- Involvement in 4 PhD theses Jury as an industrial representative
  - *At home in service discovery.* Vasughi Sundramoorthy. University of Twente, 2006.
  - *Tolérance aux fautes et exécutifs temps réel répartis*, application au modèle SCEPTRE 2, Bestaoui, Soraya, University of Nantes, 1994, French Thesis number 1994NANT2069.
  - *Contribution à l'étude des systèmes répartis, temps-réels, à haute disponibilité*, Ditwasilua Fula, University Paris VI, 1990, French Thesis number 1990 PA066512.
  - *Une contribution à la tolérance aux fautes des applications temps-réel répartis dans Electre*, Anne-Marie Déplanche, University of Nantes, 1986.

Publications

- Ada syntax diagrams for top-down analysis. Rafael Bonet, Antonio Kung, Knut Ripken, Robert K. Yates, Manfred Sommer, Jürgen Winkler. September 1981. ACM SIGPLAN Notices, Volume 16 Issue 9
- L'utilisation de Pascal en milieu industriel. Rafael Bonet, Antonio Kung, Ian Thomas. 2ème colloque de génie logiciel, AFCET, 4-6 June 1984. pp. 239-253.
- Structuring into subsystems: the experience of a prototyping approach. Rafael Bonet, Antonio Kung. ACM SIGSOFT Software Engineering Notes. Volume 9 , Issue 5 (October 1984)
- Applying a generalized host/target concept for developing subsystems in PASCAL. Antonio Kung, Michael Ian Thomas. October 1984. ACM SIGSOFT Software Engineering Notes, Volume 9 Issue 5
- GALAXY: A Distributed Real-Time Operating System Supporting High Availability. Antonio Kung, Roberto. Kung:. Proceedings of the 6th IEEE Real-Time Systems Symposium (RTSS '85), December 3-6, 1985, San Diego, California, USA. IEEE Computer Society 1985, ISBN 0-8186-0675-4
- A model for a portable Ada run-time library. Rudolf Landwehr, Peter Hensel, Rami Bayan, Antonio Kung. October 1987. ACM SIGAda Ada Letters , Proceedings of the first international workshop on Real-time Ada issues IRTAW '87, Volume VII Issue 6
- Execution Environment for ELECTRE Applications. Denis Creusot, Philippe Lemoine, Olivier Roux, Yvon Trinquet, Antonio Kung, Olivier Marbach, Carlos Serrano-Morales. October 1991. Proceedings of the 3rd European Software Engineering Conference. Publisher: Springer-Verlag
- Smart electric water heaters in Europe. Antonio Kung . EMMSEC 98. Annual Conference and Exhibition. European Multimedia, Embedded Systems and Electronic Commerce. Bordeaux, France, 28-30 September 1998.
- Electronic Commerce Services Expand Home Automation Capabilities. Antonio Kung . EMMSEC 99. Business and Work in the Information Society. Annual Conference and Exhibition. European Multimedia, Embedded Systems, Technologies for Business Processes and Electronic Commerce, 21-23 June1999, Stockholm, Sweden
- AJACS: Applying Java to Automotive Control Systems, Thilo Gaul, Antonio Kung, Jerome Charousset. Caspar Grote and Renate Ester (Ed.), Conference Proceedings of Embedded Intelligence Conference, Nürnberg, Conference Proceedings Embedded Intelligence 2001, p. 425--434, Design&Elektronik, Feb 2001.
- Secure Service Discovery in Home Networks. Scholten, J and van Dijk, H.W. and de Cock, D. and Preneel, B. and Kung, A. and d'Hooge, M. IEEE International Conference on Consumer Electronics, 8-12 Jan 2006, Las Vegas, Nevada, USA. pp. 115-116. IEEE. ISBN 0-7803-9459-3
- ANRTS Plaforms. Antonio Kung and Scott Hansen. The 4th International Workshop on Java Technologies for Real-time and Embedded Systems - JTRES 2006
- Issues in Building ANRTS Plaforms. Antonio Kung, James Hunt, Ludovic Gauthier and Marc Richard-Foy. The 4th International Workshop on Java Technologies for Real-time and Embedded Systems - JTRES 2006
- Open Home Networks: The TEAHA Approach. Hylke W. van Dijk, Hans J. Scholten, Alvaro Tobalina, Victor Garcia Munoz, Stephane Milanini, Antonio Kung. April 2007. Proceedings of the Sixth International Conference on Networking ICN '07. Publisher: IEEE Computer Society
- Architecture for Secure and Private Vehicular Communications. Papadimitratos, P., Buttyan, L., Hubaux, J-P., Kargl, F., Kung, A., Raya, M. Seventh International Conference on ITS Telecommunications, June 2007
- Architecture and Design Patterns for Ambient Intelligent Systems: an Industry Perspective. Antonio Kung. September 2007. Proceeding of the Amid 07. Publisher: Springer-Verlag.
- Kargl, F., Papadimitratos, P., Buttyan, L., Müter, M., Schoch, E., Wiedersheim, B., Thong, T., Calandriello, G., Held, A., Kung, A., Hubaux, J.P. Secure Vehicular Communication Systems: Implementation, Performance, and Research Challenges. IEEE Communications Magazine, Nov. 2008.
- Papadimitratos, P. Buttyan, L., Holczer, T., Schoch, E., Freudiger, J., Raya, M., Ma, Z., Kargl, F., Kung, A., Hubaux, J.P. Secure Vehicular Communication Systems: Design and Architecture. IEEE Communications Magazine, Nov. 2008.
- Kung A, Jean-Bart B., "Making AAL Platforms a Reality", Proceedinds of the AMI 10 workshop (AmI-10). Ambient Intelligence. Lecture Notes in Computer Science, 2010, Volume 6439/2010, 187-196.
- Gunnar Fagerberg, Antonio Kung, Reiner Wichert, Mohammad-Reza Tazari, Bruno Jean-Bart, Gerald Bauer, Gottfried Zimmermann, Francesco Furfari, F. Potortì and S. Chessa, et al. "Platforms for AAL Applications. Smart sensing and Context Lecture Notes in Computer Science, 2010, Volume 6446/2010, 177-201.
- Antonio Kung, Johan-Christoph Freytag, Frank Kargl. Privacy-by-design in ITS applications. 2nd IEEE International Workshop on Data Security and Privacy in wireless Networks, June 20, 2011, Lucca, Italy.
- Martin Kost, Johann-Christoph Freytag, Frank Kargl, Antonio Kung. Privacy Verification Using Ontologies. First International Workshop on Privacy by Design (PBD 2011), August 28, 2011, Vienna, Austria.
- Antonio Kung, Francesco Furfari, Mohammad-Reza Tazari, Atta Badii, Petra Turkama. Workshop: Integration of AMI and AAL Platforms in the Future Internet (FI) Platform Initiative. Second International Joint Conference on AmI 2011, Amsterdam, The Netherlands, November 16-18, 2011. Proceedings. Lecture Notes in Computer Science 7040 Springer 2011, ISBN 978-3-642-25166-5, 371-373
- R. Wichert, F. Furfari, A. Kung, M.R. Tazari: "How to overcome the market entrance barrier and achieve the market breakthrough in AAL". In: Wichert, Reiner (Ed.) u.a.; Ambient Assisted Living: 5. AAL-Kongress 2012. Berlin: Springer, 2012
- Antonio Kung. Privacy and ITS: Barriers. Annual Privacy Forum, October 10-11, 2012, Limassol, Cyprus
- Mathieu Jan, Christophe Jouvray, Fabrice Kordon, Antonio Kung, Jimmy Lalande, Frédéric Loiret, Juan Navas, Laurent Pautet, Jacques Pulou, Ansgar Radermacher, Lionel Seinturier. Flex-eWare: a flexible model driven solution for designing and implementing embedded distributed systems, Software: Practice and Experience. Volume 42, Issue 12, pages 1467–1494, December 2012
- Antonio Kung. PEARs: Privacy Enhancing ARchitectures. Annual Privacy Forum, May 21-22, 2014, Athens, Greece
- Zhendong Ma, Denis Butin, Francisco Jaime, Fanny Coudert, Antonio Kung, Claire Gayrel, Antonio Maña, Christophe Jouvray, Nathalie Trussart, Nathalie Grandjean, Victor Manual Hidalgo, Mathias Bossuet, Fernando Casado, and M.Carmen Hidalgo. Towards a Multidisplinary Framework to Include Privacy in the Design of Video Surveillance Systems. Annual Privacy Forum, May 21-22, 2014, Athens, Greece

Others

- Author of a book on home control networks (International Thomson Publishing) : La domotique appliquée avec le réseau domotique Européen EHS. Antonio Kung, Bruno Jean-Bart, Olivier Marbach, Sylvain Sauvage. 1996