I-Lung Kao

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Experiences

Adjunct Professor, Department of Computer Science, Texas State University
Jan 2024 – Present
- Instruct undergraduate courses in Computer System Security and Computer Networks

Product Management Director, Software Group, HCL
July 2019 – August 2023
- Strategy development and product management for BigFix Compliance and PCI products with annual revenue contribution close to $60 million
- Delivered the BigFix on Cloud offering with infrastructure hosted on Azure and managed by HCL Services

Senior Product Manager, Security Systems, IBM SWG
Feb 2012 – June 2019
- Product management for IBM QRadar products, also responsible for incorporating acquired QRadar business to IBM, migrating the QRadar appliance platform from xSeries to Dell, and simplifying the product packaging and ordering structure
- Developed the first QRadar SaaS offering with infrastructure hosted on IBM Cloud
- Product management for BigFix products

Global Strategist and Offering Manager, Security Services, IBM GTS
Feb 2008 – Jan 2012
- Strategy development and product management for the Identity and Access Management (IAM) portfolio including Identity Assessment and Strategy, User Provisioning, Web Access Management, Single Sign-On, and Total Authentication Solution
- Delivered the first cloud-based Mobile Device Security service offering

Software Architect, IBM Server and Technology (STG) Group
Aug 2005 – Jan 2008
- Driving the STG cross-brand security strategy and technical directions, and providing architecture guidance for common STG security technologies
- Establishing and managing the STG Software Development Imperative program

Software Team Manager, Tivoli Division, IBM SWG
Feb 2003 – July 2005
- Managing software development teams responsible for delivering Tivoli Directory Server and multiple Tivoli Access Manager family products
- Release management for Tivoli Directory Server, Directory Integrator, and Access Manager family products

Project Manager, Tivoli Division, IBM SWG
Jan 2001 – Jan 2003
- Project management for multiple Tivoli Access Manager for eBusiness product releases

Software Development Team Lead, Networking Software Division, IBM SWG
Sept 1995 – Dec 2000
- Design and development of Tivoli Access Manager for eBusiness

- Design and development of the Server module of IBM Global Sign-on (GSO)
- Development of IBM Distributed Computing Environment (DCE) platform

Education

- **Ph.D.** in Computer and Information Sciences (Dissertation title: "Effective and Efficient Authentication and Authorization in Distributed Systems"), University of Florida, Aug 1995
- **M.S.** in Computer and Information Sciences, University of Florida, Dec 1990
- **M.S.** in Mechanical Engineering, University of Michigan, Dec 1988

Patents

- US-10726141-B2: "Dynamically Constructed Capability for Enforcing Object Access Order", July 2020
- US-9104776-B2: "Efficient Identity Mapping with Self-correction for Cascaded Server Systems", Aug 2015
- US-8904359-B2: "On-demand Monitoring of Memory Usage", Dec 2014
- US-8296820-B2: "Applying Security Policies to Multiple Systems and Controlling Policy Propagation", Oct 2012
- US-8290955-B2: "Classification of Data in a Hierarchical Data Structure", Oct 2012
- US-8214832-B2: "Techniques for Implementing Separation of Duties Using Prime Numbers", July 2012
- US-20090132266-A1: "Weighted Condition Primitive for Descriptive Business Policy", May 2009
- US-7451147-B1: "Flexible Encryption Scheme for GSO Target Passwords", Nov 2008
- US-6651168-B1: "Authentication Framework for Multiple Authentication Processes and Mechanism", Nov 2003
- US-6526433-B1, "Adaptive Time-Out Value Setting for Distributed Computing Environment (DCE) Applications", Feb 2003
- US-6462757-B1: "Methods, System and Computer Program Product for Locating a Window of a Windows Operating System in a Computer System", Oct 2002
- US-20020122553-A1: "Method and Apparatus for Lightweight Re-keying of a Master Key in a Single Sign-On System", Sept 2002
- US-6275944-B1: "Method and System fro Single Sign On Using Configuration Directives With Respect to Target Types", Aug 2001
- US-6243816-B1: "Single Sign-On (SSO) Mechanism Personal Key Manager", Jun 2001
- US-6240512-B1: "Single Sign-On (SSO) Mechanism Having Master Key Synchronization", May 2001
- US-6189036-B1: "User Access to Objects in Group Based Access Control Based on Result of Greatest Common Divisor of Assigned Unique Prime Numbers of User and Object", Feb 2001

Publications

- "An Efficient and Secure Authentication Protocol with Uncertified Keys", ACM Operating Systems Review, Vol. 29, No. 3, Jul 1995. Also appeared in Proceedings of the 2nd Annual Workshop on Selected Areas in Cryptography, Ottawa, Canada, May 1995
- "An Extended Capability Architecture To Enforce Dynamic Access Control Policies", Proceedings of the 12th IEEE Annual Computer Security Applications Conference, San Diego, CA, Dec 1996
- "Enforcing Complex Security Policies for Commercial Applications", Proceedings of the 19th Annual International Computer Software and Applications Conference, Dallas, TX, Aug 1995