

Timothy E. Lindquist, Ph.D. Biographical Sketch

**Professor, Software Engineering Programs
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Education and Employment. Professor Tim Lindquist has held academic leadership roles including Interim Dean, Associate Dean, Department Chair, Program Chair, and Associate Chair of various academic units at Arizona State University. He is a computer scientist and software engineer who began his academic faculty career in 1979. At Arizona State University, he joined the Computer Science Department in Tempe in 1985 as Associate Professor. In 2000, he moved to the Polytechnic campus as a Department Chair to begin computing programs on that campus. He received the PhD and MS in Computer Science from Iowa State, and the BS in Math/Computer Science from Purdue. He has also worked as a software developer for General Electric, a Visiting Scientist for Institute for Defense Analyses, and as a visiting Scientist at Navy SPAWAR in San Diego. His first faculty appointment was Assistant Professor of Computer Science at Virginia Tech.

Professional Activity. Dr. Lindquist has conducted research in various aspects of software frameworks for distributed and process centered tools and environments, as well as, human-computer interactions. His expertise include mobile computing, secure distributed applications, and service oriented software architectures and frameworks. Since 1982 he has been responsible for over \$2 Million of sponsored research. He has served various capacities on software-based international programs. For example, from 1991-94 he served as a USA member of a NATO team in the area of software frameworks, which resulted in a proposed international software interface standard. From 1982-89, he was a member of a technical team sponsored by the DOD Ada Joint Program Office addressing specification and evaluation of software interfaces and tools for Ada. Dr. Lindquist has published numerous articles on software process, secure and distributed frameworks, software testing, tool interfaces, limited device applications, and human-computer interfaces. He has supervised over 120 Masters projects, over two dozen Masters Theses, and 9 Ph.D. dissertations. He is a member of the Association for Computing Machinery, the American Society of Engineering Education. He is active with computing program accreditation. He served 5 years on the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). He has been an ABET program evaluator for over 10 years.

University Activity. Professor Lindquist has served in various administrative faculty roles involving the creation, evaluation and direction of academic units related to computing, engineering and technology. He was a primary architect formulating the Division of Computing Studies at ASU's Polytechnic campus, and its academic programs. As Associate Chair of Computer Science and Engineering at ASU Tempe, he has chaired the department's strategic planning and self-study committee leading up to the one of its accreditation visits, and he has chaired departmental governance committees including graduate curriculum, undergraduate curriculum, personnel and tenure, executive, and computing resources. Dr. Lindquist teaches courses on mobile and distributed applications, and programming.

Recent Sponsored Research:

- 2015-18 App Maker Pro (AMP): Motivating STEM Study through App Development; \$1,199,000, Carole Greenes PI, Lindquist, T Co-PI, with 3 other faculty; NSF-EHR-DRL).
- 2011-12 Mobile Apps for Rapid Epidemiological Analysis, Lindquist (ASU PI), Tridane (CoPI), \$50,000. ASU as sub to Renaissance Sciences Corp (total \$150,000) by OSD SBIR Phase-I award.
- 2003-06 Performance Testing Java Runtimes on Limited Devices, \$60,000, Responsibility, Principal Investigator, IBM/Object Technologies Incorporated.
- 2003-04 Center Planning Grant for NSF Program on Computer and Network Security Research, \$100,000, Responsibility one of 3 co-pi's, SS Yau PI, ASU VP for Research.
- 1999-00 Realizing PCIS2 Process Services, \$80,000, Responsibility Principal Investigator, Navy SSC San Diego through San Diego State University Foundation.
- 1997-98 PCIS-II: Distributed Component-Based Software Engineering, \$100,000, September 1997 to December 1998, Responsibility Principal Investigator, Office of Naval Research and NReD San Diego.
- 1996-97 Assessing PCTE, CORBA and WWW, \$271,280, Responsibility Principal Investigator, The Office of Naval Research and NReD San Diego.
- 1992-95 The Institute for Defense Analyses (NATO PCIS Programme) "Technical Support in the area of PCIS Standardization" \$217,797.

Recent Publications:

- "Android and ODK based data collection framework to aid in epidemiological analysis," in Online jnl public health informatics, 5(3), pp 228-225; (Raja, A, Tridane, A, Gaffar, A, Lindquist, T, & Pribadi K,.) 2014.
- "Mobile application for wildlife capture-mark-recapture data collection and query," in Wildlife Society Bulletin, Vol 37, No. 3; DOI: 10.1002/wsb.322; (Bateman, Lindquist, Whitehouse, Gonzalez), Aug, 2013.
- "Frameworks for Securing Limited-Devices and their Applications," in Proc. 41th Annual Hawaii Int'l Conf on Systems Sciences, (Lindquist) January 2008.
- "Web-Based Course Information System Supporting Accreditation," in Proc. of the IEEE/ASEE Frontiers in Education Conf, (Kumaran, VS; Lindquist, T,) Oct. 2007.
- "Enabling Strong US Engineering Workforce for Technological Innovation: A National Partnership in Graduate Professional Education with Industry to Enhance US Competitiveness and Economic Development," in Proc. of the 2007 ASEE Annual Conference, (Keating, D, et al; Lindquist, T;) June 2007.
- "Faculty Reward System Reform for Advancement of Professional Engineering Education for Innovation: Rethinking a Model Template for Unit Criteria of Professionally Oriented Faculty," in Proc. of the 2007 ASEE Annual Conference, (Keating, D, et al; Lindquist, T) June 2007.
- "Lessons Learned Creating a Laptop Policy for Computing Programs", in Proc. of the 2006 ASEE Annual Conference, (Koehnemann, H.; Lindquist, TE) June 2006.
- "Synthesizing and Integrating Legacy Components as Services Using Adapters", Journal of the Science of Computer Programming, (Gannod, G.C.; Mudiam, S.V. and Lindquist, T.E.,) 2005.
- "Automated Support for Service-Based Software Development and Integration", Journal of Systems and Software – Special Issue on Automated Component-Based Software Engineering, Elsevier Science Publishers, (Gannod, G.C.; Mudiam, S.V. and Lindquist, T.E.,) 74 (2005).
- "Java Performance on Limited Devices"; Proc The 2005 International Conference on Embedded Systems and Applications, Las Vegas, (Pannu, K.; Lindquist, TE; Whitehouse, RO; and Li, YH) June, 2005.
- "WIP: The Software Experience," in Proc. of the IEEE/ASEE Frontiers in Education Conf, (Gary, K; Gannod, G; Koehnemann, H; Lindquist, T; Whitehouse, R,) 2005.
- "A Java Cryptography Service Provider Implementing One-Time Pad"; Proc. 37th Annual Hawaii Int'l Conf on Systems Sciences, ACM, IEEE Computer Society, (Lindquist, TE, Diarra, M, and Millard, BR), 2004.
- "Synthesizing and Integrating Legacy Components as Services Using Adapters", Journal of the Science of Computer Programming, (Gannod, G.C.; Mudiam, S.V. and Lindquist, T.E.), 2003.
- "Automated Support for Service-Based Software Development and Integration", Journal of Systems and Software – Special Issue on Automated Component-Based Software Engineering, (Gannod, G.C.; Mudiam, S.V. and Lindquist, T.E.), 2003.
- "Web Applications and Web Services: Supporting Technologies (Panel Introduction)", Proceedings Int'l Symposium on Applications of the Internet (SAINT03), IEEE, Orlando FL, (Lindquist, T.E.,) Jan. 2003.
- "A Novel Service-Based Paradigm for Dynamic Component Integration", in the AAAI-02 Workshop on Intelligent Service Integration, (Gannod, G.C.; Mudiam, S.V. and Lindquist, T.E.), July 2002
- "Security Considerations for Distributed Web-Based e-commerce Applications in Java"; Proc. 35th Annual Hawaii Int'l Conf on Systems Sciences, ACM, IEEE Computer Society, (Lindquist, TE;) January 2002.
- "Three-Segment Agent Architecture using JINI for Workflow," Proc. 2001 Intl Conf on Artificial Intelligence, Las Vegas, NV, (Schaefer, L, Graf, G, Lindquist, T;) June 2001.