DAN NESSETT

9/14/15

QUALIFICATIONS

Exceptionally broad experience in networking and distributed systems. Designed architectures, protocols and interfaces at all levels of the networking hierarchy (excluding the physical layer). A world recognized expert in networking and distributed systems security. Significant expertise in:

- massively distributed systems
- intelligence at the network edge
- active networking
- distributed applications

PROFESSIONAL EXPERIENCE

Quietbird Consulting 2002 – 2004

CONSULTING CONTRACTS

Arroyo Video Solutions [formerly Calypso Networks. Purchased by Cisco Systems on 9/13/2006] (2002 – Jan, 2004)

- Co-inventor on one patent pertaining to the streaming of digital video content.
- Designed and documented Video on Demand abstract architecture.
- Designed and documented Calypso general system architecture.
- Wrote 10 page glossary document to ensure all Calypso specifications used terms uniformly.
- Designed and created Calypso implementation specifications for Interactive Services Architecture (Time Warner).
- As part of Interactive Services Architecture working group, completely re-wrote Time Warner LSCP specification (resulting in version 1.1). Designed simplified LSCP state machine that eliminates searching states and documented it as an Annex in the LSCP 1.1 specification.
- Designed and documented Calypso security architecture.
- Designed and documented innovative group key distribution protocol for use in Video on Demand distributed systems.
- Supported marketing in developing response to Comcast Request for Information, which sought input on new Video on Demand system architecture.
- Worked as Calypso's technical liason to N2 Broadband in order to achieve certification that Calypso's equipment conforms to the Interactive Services Architecture.

Orative Corporation [Purchased by Cisco Systems on 11/20/2006]
(Febrary-March, 2002)

- Lead team that created initial Orative system architecture. Wrote 68 page system architecture specification used in process of securing VC first round funding.

3Com Corporation

1996 – 2001

POSITIONS HELD (CHRONOLOGICAL ORDER)

Security Architect, Wireless Connectivity Division
Director, Technology Research
Director, Technology Strategy
Distinguished Engineer
Consulting Engineer

ACCOMPLISHMENTS

- Co-inventor on nineteen patents pertaining to the security of networking systems.
- Co-inventor on three patents involving active networking.
- Co-inventor on network logon patent, which is the basis of IEEE 802.1x standard.
- Co-invented security technology for CommWorks Corp subsidiary, Network Systems Business Unit, Business Connectivity Product Division (NICs), and Wireless LAN Product Division.
- Led research prototype development of Multilayer Firewall.
- Created serial authentication and key distribution protocol for 802.11 wireless LAN networks, which influenced architecture of 802.11i protocol
- Created Security Architecture for 3Com products.
- Leader of corporate wide team developing internal 3Com security standards.
- Led team that investigated and wrote report on corporate converged networking technology strategy.
- Co-developed initial design of Windows NDIS API for 3Com IPSec accelerating NIC card. Consulted on card hardware design.
- Worked with external consultant to develop corporate technology strategy processes.
- Workshop Chair for Usenix Special Workshop on Intelligence at the Network Edge (March, 2000).
- DARPA Principal Investigator for no-cost contract on Active Networking from Aug. 1997 – Aug. 1999.

Sun Microsystems 1994 – 1996

POSITIONS HELD

Senior Staff Engineer

ACCOMPLISHMENTS

- Co-inventor on two patents pertaining to the security of distributed object systems.
- NEO (CORBA Development System) Security Lead.
- Participated in the development of Object Management Group Security Specification.
- Co-designer of CORBA SECIOP Sequencing Layer Protocol and Context Management protocol and state machine.
- Developed NEO Security Technical Plan, including technical solutions for message security, access control, security administration, firewall support, legacy database support, and audit.
- ONC Security Architect. Worked with NFS product group on securing NFS. Led technical design, wrote project plan, and was project co-leader.

Lawrence Livermore National Laboratory 1977 – 1994

POSITIONS HELD

Computer Scientist

ACCOMPLISHMENTS

- Led team that developed programming tools for distributed applications.
- Developed techniques that improved communications performance by several orders of magnitude between heterogeneous machines.
- Developed solutions to security and administration problems of remote execution.
- Conducted research into the security of heterogeneous distributed systems and distributed operating systems.
- Conducted research into buffer management strategies and protocols, the results of which were later employed in Network Systems Corporation products.
- Participated in the design of the LINCS Distributed Operating System.
- Participated in the design of Privacy Enhanced Mail.
- Chair of the 1993 PSRG Workshop on Network and Distributed System Security.
- General Chair of the 1994 Internet Society Symposium on Network and Distributed System Security.

- Member of U.C. Davis Graduate Group in Computer Science. From 1978 - 1984, taught courses in: 1) Operating Systems, 2) Unix Internals, 3) Networking and 4) Distributed Systems. Published 250-page course notes manuscript on Operating Systems Principals as LLNL Technical Report UCID-19076 (1981). From 1984 - 1994, supervised four Master's Degree students. This resulted in the publication of two refereed papers in international conferences [IFIP International Conference on Upper Layer Protocols, Architectures and Applications (1992); Internet Society Symposium on Network and Distributed Systems (1994)]. It also resulted in the publication of two LLNL Technical Reports.

EDUCATION

B. A. (Mathematics), Oregon State University (1967)

M. S., Ph.D. (Computer Science), Washington State University (1974)