Contact

www.linkedin.com/in/kkchristensen
(LinkedIn)
www.emergeats.com (Company)
www.incose.org/
chesapek/Docs/2008/
Presentations/2008-11-19_Christense
%20Artifacts.pdf (Other)

Top Skills

Enterprise Architecture

Systems Engineering

Requirements Analysis

Languages

English (Native or Bilingual)

Russian (Limited Working)

Publications

Information Systems Evolution and a
New Strategic Goal for TI

3D Spatial Point Patterns of
Bioluminescent Plankton: A Map of
the "Minefield"

Cloud Computing What's the hype all
about?

Wireless Headset Communication
System

Maritime Boundary Median Line
Generation Using Custom Avenue
Scripts

Kurt C.

Principal Engineer at SYSTOLIC, Inc.
Westminster

Summary

A seasoned professional, Mr. Christensen is an abstract thinker
who strives to implement solutions in such way that makes them
widely applicable. He has supported all aspects of the development
lifecycle from business needs to acceptance test. His broad technical
background has helped in the proficiency in abstracting and merging
technologies into new capabilities. He has over 8 years experience
overseeing agile technical development on Government contracts.

He is Familiar with structured modeling methodologies, including the
DoD Architecture Framework. Being facile with both meta-modeling
and database publishing, he uses these talents to create shared
knowledge bases in support of all aspects of system engineering and
project and enterprise management.

Specialties: Knowledge Capture and Representation based
on ISO-704, IDEF0, UML and Entity Relationship Modeling,
Requirements Management and Allocations, Process
Implementation, Release Management, Data Modeling and
Enterprise Architecture

Experience

SYSTOLIC, Inc.
Principal Engineer
May 2016 - Present (5 years 1 month)

Providing technical assistance and guidance, particularly as it relates to
algorithms, processes and data management.

TASC, Inc.
Senior Systems Engineer
June 2015 - April 2016 (11 months)

Designing and evaluating new system of systems architectures. Consulting on
the next-generation systems.

Emerge A.T.S.
Principal Consultant
April 2011 - May 2015 (4 years 2 months)

Providing process improvement and definition, systems engineering and database performance expertise to a team as part of a larger integrated system. Currently developing an architecture for high-performance middleware and query-time analytics within question focused data sets. Worked with a systems ontology to provide capability for anomaly detection and adaptive thresholding prior to that.

Pyxis Engineering LLC
Principal Systems Engineer
2008 - April 2011 (3 years)

Mr. Christensen was Pyxis' technical director for systems engineering, defining the systems engineering practice at Pyxis. He provided direct support as the systems engineering lead for a large (ACAT-1) development project, developing requirements, specifications and architecture descriptions leading to acquisition Milestone-C. His oversight responsibilities include release management, configuration management and the program schedule.

SRA International
Principal Consultant
2005 - 2008 (3 years)

Mr. Christensen supported all aspects of the development lifecycle from business needs to acceptance test. This included requirements analysis, systems architecture, process specification and usability analysis. Also contributed to proposal efforts.

RABA Technologies
Principal Consultant
2005 - 2007 (2 years)

In this role, he has performed system reliability analyses, reviewed software testing activities, assessing metrics and suggesting new approaches for automation. In support of this work, he developed and used a new architectural repository to capture project terminology, concepts and relationships (multi-project ontology) to (among other things) auto-populate draft proposals and test procedures. He designed these mechanisms to support CMMI Level 3+ processes.

The Boeing Company

Senior System of Systems Architect
2003 - 2005 (2 years)

Coauthored a practice guide for enterprise architects. Developed an engineering schema reflecting best practice of requirements tracking to design artifacts, contributing to a major contract win. Created an Enterprise Architecture Data Repository allowing the incorporation of data from multiple disparate sources, and publishing to arbitrary data sets.

Conquest, Inc.
Principal Consultant
2003 - 2004 (1 year)

Business development via proposal work. Developer of operational view DoDAF enterprise architecture products.

IBM Global Services
Consulting IT Architect
2002 - 2003 (1 year)

Supported requirements elicitation and capture for applications related to web-scale text analytics.

Helped develop the Financial Management Enterprise Architecture (became Business Enterprise Architecture) for the Department of Defense in the areas of Accounting and Real Property Management.

Veridian
Senior Engineer
2000 - 2002 (2 years)

Mr. Christensen provided project management for the pilot project for the Intelligence Community Multi-asset Acquisition Program (IC MAP). This pilot program provided the basis for exercising use cases and future IC MAP capabilities.

Developed algorithms and codes for Advanced Intelligence, Surveillance and Reconnaissance (ISR) Management (AIM). Worked included natural language processing, adaptive learning systems, sensor/system modeling and geographic data processing. Successfully bid development effort to migrate capabilities developed under Defense Advanced Research Projects Agency contract to the National Reconnaissance Office.

MRJ Technology Solutions

Senior Computer Analyst
1994 - 2002 (8 years)

Senior Scientist, responsible for algorithm development and for engineering and analysis of complex systems, physical science and information technologies.

Principal Engineer. Data warehouse architecture and development, environmental systems architec, algorithm development and GIS processing.

Systems Achitect. Solaris system administration, Oracle DBA and webmaster for global environmental database integrated with regional modeling system. Provided SETA support on proprietary projects.

A selection of some of his work is listed below:
• Development of scripts to parse messages (Notice to Mariners, for example) to automatically generate spatial objects for processing within Geographic Information Systems
• Developed a data warehouse architecture, algorithms and GIS processing for environmental analysis
• Performed system engineering for communications systems (fiber optic and satellite),
¬ Link margins – receiver performance, attenuation, DWDM applications
¬ Physical effects – temporal dispersion, polarization dependent loss, field modes.
• Specified and reviewed the capabilities of image processing systems.
• Developed classifier models and 3D visualization capability for bioluminescent marine creature research.
• Provided independent confirmation on algorithms related to equipment failure predictions and dynamic steering of antenna gimbals.
• Performed other system engineering and system availability analyses.
• Provided technical leadership and expertise to the development of a digital map library management system and web site.
• Let the Process Action Team on Program Management for MRJ's Software Engineering Process Group. This led to adoption of the Software Engineering Institute's (SEI's) Capability Maturity Model (CMM) and maturity to level 3 for one division.
• Contributed to numerous proposal efforts and provided SETA support on proprietary projects. Received customer awards on multiple occasions.

TeleMac Visualization

Sole Proprietor
1993 - 1994 (1 year)

While doing business as TeleMac Visualization, Mr. Christensen performed all operational and financial functions of the company. The business was primarily contract programming service with some consulting. Work included the development of C++ libraries to mimic portions of the Borland ObjectWorks libraries to run on the Macintosh platform. This enabled Windows code to run pixel-for-pixel identically on the Macintosh without modification, and allowed porting PowerCD titles from ZCI Publishing to alternate platforms (CD Audio, MS-DOS, Windows 3.1, MacOS 7) using a single code base.

Telenexus, Inc
Founder / Secretary of the Board / VP - R&D
1990 - 1994 (4 years)

After the proposal for a Wireless Headset network (SBIR Phase II) was awarded by Kennedy Space Center (KSC/NASA), Mr. Christensen founded Telenexus, Inc. as a subchapter "S" corporation, and recruited a senior management team to run the company. For the ensuing contract, he developed network protocols, an antenna voting scheme, and embedded processor microcode. Supported FPGA implementations of our custom microcontroller. He provided functional expertise for architecture and protocol development, RF and voice processing and digital design.

Apeiron
Partner / Chief Technical Officer
1986 - 1993 (7 years)

For Apeiron, Mr. Christensen was responsible for strategic and tactical management, operations and financials, enterprise wide. In this role, through proposals, technical development and communications support, he developed business relations with clients and extended the company's intellectual capital.

Highlights are provided, below:
• Authored winning proposal and performed as Principal Investigator for a Network Programming Language for Goddard Space Flight Center (GSFC/ NASA SBIR Phase I)
• Developed various multi-media and peripheral control capabilities, including a multi-media database for a large advertising firm supporting library functions, and license agreements
• Supported numerous data/database conversion and data communications projects with NOAA and the Navy

• Developed specification and prototype of a meta-project management tool for the US Global Change Research Program, simultaneously supporting some 200 projects across 10 federal agencies with a $1.8 billion budget.
• Developed advanced user interfaces for oil field inventory visualization, expert systems and natural language menu systems
• Developed operations and environmental briefing system for the US Navy, Fleet Numeric Oceanographic Center, Monterey, CA.
• Authored winning proposal and performed as project manager and principal investigator for development of a Wireless Headset Network (SBIR Phase 1) development project for Kennedy Space Center.

Texas Instruments
Member of the Technical Staff
1983 - 1990 (7 years)

For the Equipment Group/Radar Systems Division (1983 – 1988), Mr. Christensen developed algorithms and codes for minimal distortion methods for scrolling map data. This allowed local map data to be access through band-limited channels (1553 Bus). Also, he developed algorithms and codes for automated route planning, lateral trajectory computation to optimize terrain masking codes for and autonomous, airborne, covert, payload delivery system. He also developed radar sensor scheduling algorithms and codes to minimize detection of radiated emissions.

For the Corporate Research/Semiconductor Process Development Center (1988 – 1990), Mr. Christensen developed architecture to support storage and enterprise access to silicon wafer processing data. He developed a representational scheme for non-linear systems modeling encompassing neural networks and all commonly used spline models. This supported his development of algorithms to perform real-time statistical quality control on Silicon Wafer Advanced Vacuum Processors.

Education

The George Washington University
MS, Engineering Management · (1998 - 2000)

Virginia Tech
MS, Electrical Engineering · (1982 - 1984)

Virginia Tech

BS, Mathematics · (1981 - 1983)

Virginia Tech
BS, Physics · (1978 - 1981)