

# DAVID LEBERKNIGHT

DavidLeberknight@Gmail.Com

## PROFESSIONAL SKILLS

- Experience in all aspects of the SDLC
- Project management / agile development
- Fluent in English, Spanish and Portuguese
- Deep understanding of networks and security
- Database design and technology (once a DBA)
- Expert in Java and C++ (used to teach them both)
- Many years of software engineering in diverse settings
- Highly tuned UML modeling and business-analysis skills
- Authored a university course in practical object-oriented design
- Strong communication skills across the entire business spectrum
- Software design since 1980, from BASIC to enterprise architecture
- Considerable training and mentoring experience in diverse technologies
- Also: Math, AI, SOA, EAI, Ajax, CORBA, Spring, EJB3, Linux, VMware

## WORK EXPERIENCE

**Software Federation, Inc. [ SFI ]**

**1997 – Present**

**Co-Founder, Senior Partner, and (previously) Treasurer** (Boulder, Colorado)

- Consultant for numerous clients in the USA, described below as **SFI Client**.
- David is currently available for full-time or contract work in New Zealand.

**Jade Software Corporation Ltd.**

**2008 – 2009**

**Delivery Manager New Zealand** (Christchurch, New Zealand)

- Managed numerous project teams.
- Introduced Scrum (agile development) as certified Scrum-master.
- Member of the project board (ala Prince2) for Methodware's Enterprise Risk Assessor (Web2, SOA, Microsoft .NET).
- Java architect in a consulting role for Arc Innovations (owned by Meridian Energy) on the Advanced Metering Infrastructure programme (Spring, ESB, Tomcat, IBM MQ). David taught Java, conducted design / code reviews, did some OO design, and helped coordinate the efforts of multiple Scrum teams.

**SFI Client - Xilinx, Inc.**

**2006 – 2007**

**Consultant** (Longmont, Colorado)

- Introduced VMware virtualization technology to Xilinx's Computer Farm Services group (network and system administration with Solaris).

**Latis Networks, Inc. (StillSecure)**

**2006**

**Director of Product Engineering** (Superior, Colorado)

- Led the engineering and project management for the Cobia Unified Network Platform, a modular Web2 application designed to integrate open-source network and security services (router, firewall, DNS, DHCP, with more modules planned). David brainstormed requirements with project stakeholders, recruited team members, designed the system

architecture, and coded the core infrastructure. (Java EE 5, Hibernate, JBoss, JSF, Linux, Ajax, VMware, PostgreSQL, Eclipse, SVN, Apache Ant, Python).

**Sabbatical – World Tour**

**International holidays, 2003 – 2010**

- Blog (an experiment in photo-journalism): [www.LEBERKNIGHT.com](http://www.LEBERKNIGHT.com)

**SFI Client - National Center for Atmospheric Research (NCAR)**

**1997 – 2003**

**Consultant** (Boulder, Colorado)

- Recipient of NCAR / UCAR's **Outstanding Accomplishment Award for Scientific & Technical Advancement** - for the very successful 4DWX project:
- (2001 - 2003) Software Development Engineering Lead for the Four Dimensional Weather Engineering Group (4DWX); we built a comprehensive suite of state-of-the-art tools for meteorologists. David was responsible for the redesign of this large and important system, to make it both scalable and modular. This included turning a data-service API into a bona-fide data server on its own hardware node, refactoring several applications to incorporate new design patterns (eXtreme Programming), and giving high-profile client presentations. Lots of mentoring! David also reused his own Custom Query Tool (Java Swing) to make it easy to interrogate the MySQL database.
- (1998) Primary consultant for an enterprise-wide business-process re-engineering effort, creating UML analysis models that were used to identify operational inefficiencies.
- (1997 – 2001) Designed and delivered courses in **Object-Oriented Design** and **Java**.
- (1997) Invited lecturer on **Commercial Middleware** for a Workshop on IT Strategy.

**University of Colorado (CU)**

**1999 – 2002**

**Department of Computer Science – Faculty - Lecturer** (Boulder, Colorado)

- Course author for CSCI 4448: **Object-Oriented Programming and Design**.
- Topics include: OO analysis and design, UML, design patterns, Java, C++, database technology, XML, EJB3, distributed architectures, and (agile) project management.
- Course materials are available as PDF files: [www.GUI.net/cs4448.html](http://www.GUI.net/cs4448.html)
- See how students rated the course (green is good): [www.cs.colorado.edu/courses/fcqs/david\\_leberknight.html](http://www.cs.colorado.edu/courses/fcqs/david_leberknight.html)

**SFI Client - Interactive Gaming and Wagering N.V.**

**1999 – 2000**

**Consultant** (Willemstad, Curacao, N. A.)

- Designed and implemented Java applets (as well as the corresponding server-side infrastructure) that play casino games for real money (Java, SQL Server, Windows NT).
- The high-resolution, direct-manipulation user interface was written in Java 1.02 for browser compatibility.

**SFI Client - Level (3) Communications, Inc.**

**1998 – 1999**

**Consultant** (Broomfield, Colorado)

- Developed a “universal inventory database” (Java, CORBA, Vitria, UNIX, Oracle).

- SFI Client - Avitek Inc.** **1998**  
**Consultant** (Boulder, Colorado)
- Development of the middle tier for a 3-tier application (Java, WebLogic, TOPLink, Oracle).
- SFI Client - Janus International Holding Co.** **1998**  
**Consultant** (Denver, Colorado)
- Responsible for training and mentoring Janus' IT staff in Object Technology and Project Management by teaching classes and working on several projects (Java, C++).
- SFI Client - Lucent Technologies** **1997 – 1998**  
**Consultant** (Boulder, Colorado)
- Redesigned and implemented the manual router for Lucent's FPGA CAD editor (C++).
- SFI Client - DirecTouch, Inc.** **1997**  
**Consultant** (Broomfield, Colorado)
- Designed the start-up company's software solution (Java, Gemstone/J).
- University of Colorado (CU)** **1997 – 1998**  
**Division of Continuing Education - Instructor** (Boulder, Colorado)
- Instructor for the **Intermediate and Advanced C++ Programming** courses.
  - Instructor for the **Object-Oriented Design Patterns** course.
- Storage Technology Corp. (StorageTek)** **1997**  
**Consultant** (Louisville, Colorado)
- Implemented a new user interface for a marketing tool (C++, XVT, Windows and Macintosh).
- Bolder Heuristics, Inc. (BHI)** **1993 – 1996**  
**Senior Engineer** (Boulder, Colorado)
- Client: Storage Technology Corp. (StorageTek) : Architecture consultant for a large software project. Taught classes in object-orientation and relational-database design.
  - Client: Health Decisions LLC. : Responsible for all aspects of database development for 7x24 health care call center, including: requirements gathering, software design, data modeling, administration (as the DBA), performance tuning, and writing SQL stored procedures (SYBASE). Also managed the Data Load sub-project (Visual C++) while teaching nurses how to query the data warehouse in SQL.
  - Client: USWest : Responsible for the interface between the Knowledge Base and Corporate Database Groups, including the supervision of other contractors (C++, Prolog).
  - Client: MIS, Inc. : Designed a framework including Bob, the crucial component that managed object lifecycles and controlled transactions (C++, Windows). This was David's first project implemented with rigorous unit testing.
  - Client: Itron, Inc. : Designed and implemented an OO architecture (C++, UNIX).

**NeoCAD, Inc. (now Xilinx, Inc.)** **1992**  
**Consultant** (Boulder, Colorado)

- Used fuzzy logic to optimize NeoCAD's FPGA CAD "partitioner" (C++, UNIX).

**Carnegie Mellon University (CMU)** **1990 - 1992**  
**CLARIT Project (as CMU graduate student)** (Pittsburgh, Pennsylvania)

- Wrote Lisp for doing linguistic analysis of text to determine the concepts expressed within.

**Japan Marketing Data Systems, Inc.** **1990**  
**Consultant** (Tokyo, Japan)

- Wrote C utilities to convert between various Japanese kanji (multi-byte character) formats.

**Daisy/Cadnetix, Inc.** **1987 - 1989**  
**Software Engineer** (Boulder, Colorado)

- Developed the printed circuit board CAD router (C, C++, Pascal, UNIX, microcode).

**Gould Electronix, Inc.** **Summers of 1985, 1986**  
**Engineering Co-op (as Cornell undergraduate)** (Cleveland, Ohio)

- Various small projects (Fortran, UNIX, Mentor Graphics CAE circuit simulations).

**Fabri-Centers of America, Inc.** **Winter Break 1983, Summer 1984**  
**The company's only programmer (as Cornell freshman)** (Cleveland, Ohio)

- David began his career by designing and implementing a system to automate a warehouse shipping office (a successful solo effort in DBASE II and DOS on an IBM PC).

## **EDUCATION**

**M.S. in Computational Linguistics, Carnegie Mellon University** **1992**

- Artificial Intelligence and Linguistics, applied to machine understanding of natural languages.

**B.S. in Electrical Engineering, Cornell University** "With Distinction" **1987**

- Graduate-level work in computer hardware architectures and quantum physics.

**The Mercersburg Academy (High School)** "Cum Laude" and "High Honors" **1983**

- Began programming TRS-80 BASIC in 1980.
- Won prizes in Mathematics and Spanish.

## **NATURAL LANGUAGES**

**English** - Native.

**Portuguese** - Fluent (Brazilian wife plus extensive travel, with translation experience).

**Spanish** - Fluent (extensive studies plus extensive travel).

**French** - Conversational (some classes plus some travel).

**Japanese** - Basics (studies and travel, but a long time ago).