

# Philipp K. Janert, Ph.D.

## Contact:

Email: [janert@ieee.org](mailto:janert@ieee.org)  
[janert@cpan.org](mailto:janert@cpan.org)

Web: [www.beyondCode.org](http://www.beyondCode.org)  
[www.linkedin.com/in/janert](http://www.linkedin.com/in/janert)

## Overview:

- Analytics expert
- Author of two books on data analysis
- Ph.D. in theoretical physics

## Books:

Data Analysis with Open Source Tools  
O'Reilly (2010)

Gnuplot in Action: Understanding Data with Graphs  
Manning Publications (2009)

## Contributions:

Statistics::KernelEstimation

A Perl module (CPAN) for Kernel Density Estimation of statistical data sets.

HTML::Dashboard

A Perl module (CPAN) for metrics dashboards and reports.

Graphics::ColorUtils

A Perl module (CPAN) for color management.

## Technical Expertise:

Languages Perl, Python, Java, C/C++

Databases SQL; Oracle, MySQL, PostgreSQL, SQLite

Markup HTML, XML, DocBook, WAP/WML; LaTeX2e

Platforms Unix/Linux toolchain

Modeling OOA&D, UML, ER Diagrams, Database Design

## **Professional Experience:**

### **2008- Owner, Principal Value, LLC; Seattle, WA**

Principal Value provides consulting services to corporate clients in the following areas:

- Data Analysis
- Mathematical Modeling
- Business Intelligence
- Corporate Metrics

### **2010-2010 Author, “Data Analysis with Open Source Tools” (O'Reilly, 2010)**

A comprehensive introduction to data analysis for a technical audience.

### **2007-2009 Author, “Gnuplot in Action” (Manning Publications, 2009)**

A book on graphical data analysis using the Gnuplot program.

### **2003-2006 Technical Program Manager, Amazon.com; Seattle, WA**

2006 Technical Program Manager, Transaction Risk Analytics

Developed a new process to reduce an so-far unrealized form of bad debt, from initial inception, through a workable prototype. Handed project off to implementation team.

2005 Technical Program Manager, TransShipment

Developed and delivered a new materials handling process, which saves Amazon.com \$1.5 million (net) per year in outbound shipping cost.

2004 Process Engineer, Strategic Task Force (Fulfillment Ops)

Developed analytical predictive models for worker productivity and rolled out new labor management tools based on them.

2003 Process Engineer, Order Picking Team

Plant Liaison, Sponsor for several Six Sigma Black Belt projects in Amazon's fulfillment centers.

### **2002 Web-tier Engineer, AltaServ Inc; Kirkland, WA**

Architecture, design, and implementation of a 3-tier, web-based workflow automation and document management system for the insurance industry using J2EE.

### **2000-2001 Project Manager & Technical Lead, Netcommerce LLC; Seattle, WA**

Architecture, design, and implementation of a component based, highly scalable n-tier transaction processing engine, for wireless and web-based eCommerce applications using Java and Apple WebObjects.

### **1998-2000 Software Consultant, iteratec GmbH; Frankfurt, Germany**

Analysis, design, and implementation of a 3-tier Client/Server information retrieval system for the airline industry using C++ and BEA Tuxedo on Unix.

## Education:

1997-1998 Postdoctoral Fellow, MPI fuer Polymerforschung, Mainz, Germany  
1992-1997 Ph.D. in Theoretical Physics, University of Washington, Seattle, WA  
1991-1992 Graduate Studies, Mainz, Germany  
1989-1991 Undergraduate Studies, Goettingen, Germany

## Selected Publications:

Data Analysis with Open Source Tools

O'Reilly, November 2010

<http://oreilly.com/catalog/9780596802363>

Gnuplot in Action – Understanding Data with Graphs

Manning Publications, August 2009

<http://www.manning.com/janert>

A Tale of One Application, a Group of Users, Two Languages, and a Few Tools

InformIT, April 2007

<http://www.informit.com/articles/article.asp?p=715006&rl=1>

Advanced HTML::Template: Filters and Widgets

O'Reilly Perl.com, November 2006 and February 2007

<http://www.perl.com/pub/a/2006/11/30/html-template-filters.html>

<http://www.perl.com/pub/a/2007/02/02/htmltemplate-widgets.html>

Embedded Databases

O'Reilly Perl.com, September 2004

<http://www.perl.com/pub/a/2004/09/12/embedded.html>

Practical Database Design, Parts 1 and 2

IBM developerWorks, May/June 2003

<http://www-106.ibm.com/developerworks/web/library/wa-dbdsgn1.html>

<http://www-106.ibm.com/developerworks/web/library/wa-dbdsgn2.html>

## Patents:

US Patent 7,243,001

Time-based warehouse movement maps

US Patent 7,246,706

Sorting using modular stations

US Patent 7,331,471

System and method for modular sorting stations

Last updated: November 2010