

# Philipp K. Janert, Ph.D.

## Contact:

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## Overview:

### Analytics

Ph.D. in Theoretical Physics  
I wrote a book on graphical data analysis using open-source tools

### Software Development

Perl (CPAN contributor), Python, Java, C/C++; Relational DBs; Linux/Unix

### Process Improvement

Lean/Six Sigma Methods in a warehousing/manufacturing environment

### Leadership

Recruiting, Goal setting, Mentoring, Performance Management

I like complex and ill-defined situations, where I am required to wear multiple hats and make contributions on many levels. I prefer environments where formal structures are missing or not yet established, and where the direction for the groundbreaking first step must still be found.

I teach classes on Object-Oriented Analysis and Design and Business Intelligence and Data Analysis at the University of Washington. I have written about software and software development for IBM developerWorks, the O'Reilly Network, IEEE Software, and the Linux Magazine, and am named inventor on two issued patents.

## Projects and Contributions:

“Gnuplot in Action: Understanding Data with Graphs”  
Manning Publications (2008)

### 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/J2EE, C/C++ , awk
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

### 2007-2009 Author, "Gnuplot in Action" (Manning Publications, 2009)

A book on data analysis using open-source tools, based on my experience in academia and industry.

### 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.

**1997-1998 Postdoctoral Fellow, MPI fuer Polymerforschung; Mainz, Germany**  
Research on several numerical and simulation projects in the theory group.

### **Education:**

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:**

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: August 2009