



V I R T U A L G E N I U S  
AGILITY. CRAFT. ARCHITECTURE.

# Paul Rayner

2628 S Tennyson Way  
Denver, CO 80219  
303-374-4370 (Cell)

paul@virtual-genius.com  
[www.virtualgenius.com](http://www.virtualgenius.com)  
<http://www.linkedin.com/in/virtualgenius>

## EXPERIENCE

Apr 2006 – Present

### **Independent Consultant/Principal, *Virtual Genius, LLC***

- Design, .NET development, pair programming, tooling and agile process coaching for Larimer County ETHOS open source health system development team.
- Technical lead/architect for Ball Corporation project. Pair-programming in .NET with developers, solution design, agile process coaching and technical leadership.
- Custom .NET development of *TradeTracker* (trade tracking solution) and *Catalyst* (mortgage pricing solution used to securitize mortgage loan pools) for *MountainView Capital Group*. Support and custom development for mvservicing.com DNN website for *MountainView Servicing Group*.
- Founder and president of Denver chapter of the *International Association of Software Architects* (IASA) ([www.iasadenver.org](http://www.iasadenver.org))

Jul 2007 – Jun 2009

### **Development Manager/Solutions Architect, *The Warranty Group (frmly AWG)***

- Architect, design and development of enterprise warranty solution in .NET (C#, SQL Server 2005, SSIS, SSRS, BizTalk). This included the creation of system technical design documentation, C-level presentations to both IT and non-IT project stakeholders, working with business customers and business analysts to define business needs and communicate to development team, as well as extensive hands-on coding.
- Transition development effort to full implementation of Scrum agile development framework and guided distributed (Denver, Chicago, Buenos Aires) development team through several major changes (eg. building new Chicago-based team, separating into two Scrum teams, building new Buenos Aires team). Provide internal training and coaching on agile development.
- Provide technical leadership in development practices such as Test-Driven Development (TDD) and Behavior-Driven Development (BDD), Continuous Integration, and Domain-Driven Design (DDD), peer code reviews; and tools such as TFS, Visual Studio 2008, NHibernate, NUnit, NCover, NDepend, Resharper, RhinoMocks, CC.NET and Nant).
- Perform interviewing, training and mentoring for development team. I conducted interviews, created and reviewed a technical assessment instrument, and ensured that all our team members were of the highest technical acumen and fitted well with the rest of the team.
- Coordinate development efforts between TWG projects and work alongside Enterprise Architect group to define Enterprise Architecture strategy.

Apr 2006 – Jul 2007

### **Software Developer, *Aon Warranty Group (AWG)***

- Design and development of solution for synchronization of data between systems (SQL Server 2005 TSQL, Analysis Services, Integration Services, Reporting Services, Team Foundation Server, SharePoint). Development of .Net application for detailed data analysis and comparison (Visual Studio 2003/2005, TSQL, Infragistics components).
- Development of prototype data warehouse solution for *Hyundai* proposal.
- Provide assistance with initial architectural analysis for WLS project as well as development mentoring to .Net development team.

- Mar 2004 – Mar 2006 **Senior Software Developer, Matrix Bancorp**
- Ongoing development with Bank's residential mortgage portfolio data warehouse, including development of C# Windows forms applications and web applications for ETL functionality and interfacing with other corporate applications.
  - Develop mortgage backed securities pricing application using SQL Server 2005, Visual Studio 2005. Tracked and managed development issues using SharePoint.
  - Create reports for deposit file validation system. Design and implement ETL functionality, database and reporting solution for QI system. Ongoing maintenance and support for all SQL Server-based bank applications
- Apr 2002 – Feb 2004 **Project Manager/Solution Architect, ASTI**
- Managed entire development effort with large offshore (Beijing, China) in-house software development team to deliver suite of web-based K12 education applications. Performed solution design, database design and maintenance, code and design review, installation, and product design. Developed online catalog and enrollment management system for *Michigan Virtual High School* ([www.mivhs.org](http://www.mivhs.org)). Handled project proposal, budget and schedule, client liaison, system requirements and project documentation and all ongoing maintenance and enhancements.
  - Responsible for all client deployment, support, and training for applications. Developed release notes, training materials and documentation as well as software standards and procedures for offshore development team. Project management for development of "CAVE" virtual reality room for *TACOM* (military).
- Aug 1999 – Feb 2002 **Web Architect/Developer and Independent Consultant**
- Technical advisory role in setting up online e-commerce business *Seven Loaves* ([www.sevenloaves.com](http://www.sevenloaves.com)). Online form development for *Pontem Software* (VBScript, ASP).
  - Website development for *New Tribes Bible Institute* and *New Tribes Mission* website. Network administration for campus network. Database development for student registration database development (Visual Basic/Access).
- Jan 1998 – July 1999 **Analyst Programmer, Government Employees Superannuation Board (GESB)**
- Java development and website design for new corporate Intranet (JSP, Perl, HTML, JRun). Development of web-based electronic data-exchange system.
  - Teamleader for PC-based development and support team. Management of team and budget. Project manager for Y2K PC Applications subproject.
  - Technical support for redevelopment and ongoing maintenance of *GESB* Web site.
- May 1997 – Dec 1998 **Software Development Consultant and Trainer, Virtual Genius Pty Ltd**
- *Java* course instructor for *Camtech/Communica Systems*. System/network administration course instructor for *Sun Microsystems* and *Silicon Graphics* courses. System administration consulting for various locations around Australia.
  - System Administrator for *Camtech/Communica Systems* Solaris training lab.
  - Provided multimedia web design, software development, training and consultancy to a variety of Australian clients in the finance, mining and business sectors.
- 1996 - 1997 **Perth Software Coordinator, Maptek Pty Ltd**
- Managed all software development projects and development staff in Perth office.
  - Coordinated client technical support and performed local code integration.
  - Designed and implemented procedures for interviewing new programming staff.
- 1995-1996 **Senior Software Engineer, Maptek Pty Ltd**
- Developed comprehensive groundwater modeling module for the Vulcan software suite. This module has been used successfully to model complex aquifer systems.
  - Consulting in Thailand - five months software development and *Silicon Graphics Irix* system administration for EGAT Thailand.

1990-1995

**Software Engineer, Maptek Pty Ltd**

- Software development for *Vulcan* mine-design and modeling application suite, particularly 3D graphics applications such as the *Vulcan* Geotechnical modelling module. This module has been a key factor in the sale of *Vulcan* worldwide, including large installations at such sites as Escondita, BHP Newman, ETSA and OTML.
- Developed advanced block modeling reserves tool. This system is used on a daily basis by major production mine sites worldwide to model and report on their ore reserves.
- Provided installation, training and consultation services to various mine sites in Australia, including Placer Granny Smith, Hamersley Iron and ETSA Leigh Creek.

**PRESENTATIONS (INCL. SCHEDULED)**

*Introduction to Domain-Driven Design* – IASA Denver Chapter (Dec 2008)

*Agile development panel discussion* (invited speaker) – Northern Colorado .NET Users Group, Fort Collins (May 2009)

*.NET, Open Source and Mono* – Denver Open Source User Group (DOSUG) (May 2009)

*Agile Metrics panel discussion* (invited speaker) – Agile Denver (July 2009)

*Done: Are we there yet?* – Agile 2009, Chicago (August 2009)

*.NET, Open Source and Mono* – Colorado Springs Open Source Meetup Group (Sep 2009)

*The Future of Architecture panel discussion* (invited speaker) – IASA ITARC conference, NYC (Oct 2009)

*Still No Silver Bullet? Thoughts on Design, Complexity and the Architect* - DOSUG (Feb 2010)

*Keeping Architectures Relevant: Using Domain-Driven Design and Emergent Architecture to Manage Complexity and Enable Change* – ITARC, Austin (Feb 2010)

*iPhone Development with .NET* – Scandinavian Developers Conference 2010, Sweden (March 2010)

*Measure for Measure: Lean Principles for Effective Metrics and Motivation* – Lean Software & Systems, Atlanta (April 2010)

*The Agile Utility Matrix* – SATURN, Minneapolis (May 2010)

**CERTIFICATIONS**

Certified ScrumMaster (Jan 2008)

**MEMBERSHIPS**

International Association of Software Architects (IASA) Denver Chapter, President and Founder

Denver Open Source User Group

American Philosophical Association

Evangelical Theological Society

Society of Christian Philosophers

Evangelical Philosophical Society

**EDUCATION**

2004-2009

**Denver Seminary**

*Masters of Arts (Philosophy of Religion)* 4.0 GPA

- Winner of *Robert G. Kay Scholarship Award* for the highest GPA in the MA program.

2001-2004

**Trinity Theological Seminary**

*Masters of Arts (Theology)*

1990-1991

**Curtin University of Technology**

*Bachelor of Applied Science (Computer Science)(Honours) First Class*

- Winner of *AURISA* prize for best Honours dissertation. Winner of *Curtin University of Technology* School of Computing prize for highest scoring Honours Student. Winner of *Associated Surveys International* prize for best Honours dissertation.

1987-1990            **Curtin University of Technology**  
*Bachelor of Applied Science (Maths and Computing)*

1980-1986            **Lesmurdie Senior High School**

## **PUBLISHED WORKS**

Rayner, P. (1990) *A Delaunay-based technique for the manipulation of triangulated surfaces*. Proc. AURISA 90: 483-492. Aust. Urban and Regional Information Systems Assoc.: Canberra, Australia.

Rayner, P. (1990) *The Delaunay Pyramid – Implementing a New Surface Representation Technique* (Honours Thesis). Curtin University of Technology: Perth, Australia.

## **COURSES TAUGHT**

Jan 2010            *Acceptance Test-Driven Development with Cucumber* (private course)

May - Nov 97    *Introduction to Java* (SL-230) - *Communica Systems, Perth*  
*Java Application Programming* (SL-270) - *Communica Systems, Perth*  
*Solaris 2.x System Administration* (SA-285) - *Communica Systems, Perth*  
*Solaris 2.x Network Administration* (SA-380) - *Communica Systems, Perth*  
*Irix System Administration* - *REIV, Melbourne & Vislabs, Sydney*

## **REFERENCES**

See <http://www.virtual-genius.com/testimonials.html>.