

Peter Chris Di Giulio

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Remote

Abruzzo, Italy

Summary:

Database Engineer, requirements/data analyst, TSQL/Delphi developer, solutions architect, modeler, DBA, technical writer, and electrical engineer; often in a project leadership role. Broad analytical, intuitive perspective; strive for optimal, real-time business solution. 27 US Patents.

Tech Stack	Recent Experience	Career Proficiencies	Exposure
Dev Process:	Agile, JIRA, Remote	Waterfall	
Database:	SQL Server 2012, 2016, SSMS, SSIS, SSRS, Oracle, PostgreSQL	Modeling, Erwin, Interbase, Paradox	Sybase, Access
Software:	TSQL, C#, Python, Django, Toad, SVN, Redgate, Github	Delphi, OOPascal, Fortran, SAS, C++, Java	JavaScript, Assembler
Internet:	XML, JSON, AWS	IBM MQ Series, DLLs	IIS
Comm:	TCP/IP, FTP, ACH Posting, EDI, PGP, POP, SMTP	Tick Data, IVR, TAP, RS232, Custom	SERCOS, RS485
OS Usage:	Windows	VMWare, MVS	Unix
Productivity:	MS Word, Excel, PowerPoint, Project	TQM, PC CAD, ASICs, Simulation, Regression	Statistical Design of Experiments, Xilinx
Functional:	Pricing, Payments, Loans	CRM, R&D	Neural Networks

Education

Cornell University; College of Engineering

Master of Electrical Engineering – with Honors

Master’s Project: Predictive Analytical Model for Multivariate Systems.

Bachelor of Science - with Honors

Applied Mathematics & Computer Science

Work/Project History:

Career achievements span engineering and information technologies - research, analysis, development, deployment, production support, continuous reporting, improvement, data cleansing, performance tuning, and data migration. Large, small, and start-up companies, driven to optimize value delivered; providing robust, real-time performance subject to real-world constraints. Engineering education. Later founded a technology start-up integrating diverse technologies to provide real-time stock and option alert services. Focus is now on IT product and service offerings.

NRG Energy Inc, Data Services; Database Developer

9/2016 – 3/2020

Contract assignment on SQL Server and Oracle platforms, involving significant complex SQL Scripting. Well documented and testable development include new processes and improvements for:

- Automation of various cross-platform system processes,
- Cross-platform account migration,
- Enhancement of centralized client communications,
- Cross-platform Customer representative awarding systems, and
- Consolidation of utility price and invoice data to support client servicing.

Developer / Analyst

- Architect, data modeler, TSQL, Delphi developer. Constructed an accelerated debt reduction service that retrieves funds collected from multiple client accounts to pay multiple periodic loan payments on the client's behalf to maximize interest savings while minimizing the time to pay off loans. Patent pending on an algorithm for recovery from a funding failure event.
- Prepared TSQL scripts, procedures, triggers, and functions to implement real-time and back-end processing requirements, support web services, reporting facilities, and migrate data. Employ significant built-in test and simulation testing in advance of major deployments.
- DBA: multiple, synchronized, replicated, 24x7 production DBs (50 GB). Created an archiving system. Migrated to SQL Server 2008, optimizing maintenance plans and DB statistics.
- Employed DLLs, ActiveX components to post payments & credits (ACH, RPPS, check printing), support client servicing, and implement FTP, email requirements, & overnight processing.
- Created a sophisticated affiliate compensation structure and financial reporting system that provides broad flexibility to customize commission payout requirements. Incorporates built in reconciliation on a client-by-client basis, with a sophisticated Excel report.

Relevant achievements of earlier employment

- **E-Commerce Products Group**; Lead Delphi/TSQL Developer; SQL Server, Erwin: Prepared real-time, scheduled 24x7 payment web services. Facilities: ACH (and other) Import/Export files, card settlement, check/coupon printing. Employed DLLs, IBM MQ Series, C++, COM, and FTP.
- **Warburg Dillon Read**; Consultant: Delphi/SQL developer and project leader in the global deployment of four multitier CRM applications on a replicated Sybase platform during the Y2K period. Technologies involved also included Java, COM, XML, Corba, JDBC, and Email.
- **ThomasNet Publishing**; Consultant: Delphi/SQL developer; Oracle, Erwin: Created a C/S application to manage the production of the client's information product, managing hand-offs in the process.
- **Alert Technologies LLC**: Formed this company to provide real-time, customized alert notifications. System employed Delphi, SQL, Interbase, IVR, and TAPI to filter financial and sports "Tick Data" and send alert messages to pagers. Subscriber based achieved more than 1000 clients at its peak.
- **Pitney Bowes, Inc.**: Advanced numerous concepts, with numerous development achievements:
 1. Conceptualized, formalized, and designed a unifying real-time communications architecture to accelerate low cost robot-like product development, supporting both distributed & centralized servo control (google SERCOS). Incorporates power distribution and packaging concepts.
 2. Lead the development of 3 ASIC devices for a high-volume electronic postage meter, personally designing the most complicated gate array. Rapidly wrote a language compiler in Pascal to facilitate generation of thousands of input/output vectors; thereby accelerating simulation testing of the design across anticipated process and environmental conditions. First device samples were completely functional; a significant achievement at that time.
 3. Pioneered a SAS TQM initiative to enhance product reliability and servicing by analyzing product maintenance effectiveness and repairs against product usage and failure metrics.
- **The MITRE Corporation**; Member Technical Staff: Developed a concept feasibility model.

27 U.S. Patent Awards: peterdigiulio.com/DiGiulioPatentList160218a.html

A complete career summary and chronology can be found at peterdigiulio.com .