

## Database Developer, Systems/Data Architect & Dev Lead

### Thought Leader Delivering Innovative IT Solutions for Complex Business Problems

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|----------------------------------|--|--------------------------------------|
| ■ Application / Data Architect   | ■ Application DBA  | ■ Computational Finance              |
| ■ Application Development        | ■ Data Warehousing   | ■ Business Process Analysis          |
| ■ Back End DB Developer          | ■ Data Modeling: Entity Relational, Anchor; Current, Temporal, Bi-Temporal | ■ RE/PE Fund Accounting              |
| ■ Agile Scrum & Full SDLC        | ■ Data Governance  | ■ Alternative Investments            |
| ■ Multiple Programming Languages | ■ Systems Integration  | ■ Client Report Design               |
| ■ Multiple Data Base vendors     |  | ■ Business Analysis and Requirements |

LinkedIn: [Profile](#)

Recent: [Patent, Trainings and Certifications](#)

Highly accomplished Application Developer and Tech Lead with the emphasis on the Back-End and Data Base as a foundation for a solid and robust implementation. Extensive technical and business expertise. Experienced in leading multicultural onshore/offshore development and support teams; Strengths include: business analysis, data modeling, application DB design and development, financial computation (waterfall), application lifecycle management, database and data warehousing technologies, problem solving, innovation thinking. Multilingual in English and Russian.

### Systems, Tools and Technical Proficiencies

Platforms / OS: Windows, UNIX  
 Databases: **Oracle; Sybase; Microsoft SQL** Server; Ingres, MS Access; exposure to MongoDB, PostgreSQL.  
 Reporting/BI: Business Objects; COGNOS  
 Data Modeling: **ERWIN**, ER-Studio, UML;  
 DW and ETL tools: **SNOWFLAKE** ([Badges](#)), Golden Gate, SSIS, DATA STAGE, INFORMATICA  
 Languages/Tools: **SQL; PL/ SQL; T-SQL; UNIX Shell, Python**, Java Script; C / C++, Java; Visual Basic; HTML, XML; GIT/GITHUB, CLEARCASE, PERFORCE.

### Professional Experience: Accomplishments and Achievements

#### Vice President

State Street (Princeton, NJ)

Nov-2018 – Present

Lead developer. Implemented Data strategy solution for Private Equity (PE) and Real Assets (RA) data Integration and Data Warehousing, using Enterprise-wide data Service Platform (ESP). Ensured that the data was fed from Fund Accounting, Portfolio Management, General Ledger and other internal systems, integrated, transformed, enhanced and delivered or presented in a holistic unified view to the Business and diverse groups of Clients.

- Designed and implemented ESP structures, objects and transformations from data inception to presentation, addressing evolving business data and reporting requirements. Maintained feeds from variety of sources (ORACLE, SYBASE, MSSQL), Systems (INVESTRAN, Invest AI), and feed methods (Golden Gate, SSIS with file Transfer, Direct Db Connections, etc.) supported by ESP. Monitored and maintained physical layer (indexes, partitions) to enhance performance.
- Enhanced SSIS Packages and MS SQL extracts Stored Procedures ensuring that multi-million records INVESTRAN Feed files are partitioned/split into manageable chunks for efficient asynchronous and parallel consumption by ESP.
- Revamped PE INVESTRAN Feeds files processing UNIX Shell Script, ensuring Chronological order of file processing, effective Error Condition handling and efficient Notifications.
- Suggested and tested the approach, and Implemented Data Cleanup process for PE ESP DB tables for trimming As-At bi-temporal dimension using ORACLE Partition Swap functionality, improving performance and reducing downtime.
- Devised and implemented an ESP data flow and Feeds for Real Assets (RA) Trial Balance Report that included Data Stage replication from RA Core DW to the Staging Sybase environment, Golden Gate Feed to ESP, ESP Subject Area Categories and Marts, ESP IRD reporting.

**State Street (Princeton, NJ)****Feb 2012 – Nov-2018**

System and Data Architect, Technical Leader of a team of onsite and offsite/offshore developers. Enhanced and maintained the Real Estate and Private Equity Investment Fund Accounting Platform handling multiple funds with total AUM ~30 Billion USD, and performing complex Limited Partnership Agreements (LPA) Investor-level calculations with large volumes of detail transactional data. Responsible for design, development and support of the system's data repositories, interoperability and integration of the component subsystems. Principal developer of the reporting data warehouse that interfaced BI subsystem and integrated with fund-level ledger and investor services subsystems. Ensured consistency and near-real time delivery of calculation results and dimension changes to the data warehouse.

- Provided consistent and coordinated design solutions across all subsystems (GUI, Calculation Engine, Operational Data Store, Reference Data, and Reporting Data Warehouse), lead and hands-on participated in all database layer development.
- Designed enhancements for the Data Models (ERWIN) to align with the new Fund and Client requirements.
- Designed and implemented (ORACLE, PL/SQL, ORACLE Loader, Shell Scripting ORACLE SCEDULER, ...) Reporting Data Warehouse, Including Dimensions ETL, Dimension maintenance, DW data feeds, and DB maintenance jobs. Responsible for all aspects of the DW subsystem, including escalated production support, maintenance, data administrating, etc. Specifically:
  - Ensured accurate historical data migration from prior system.
  - DW data model accommodated all variety of historical data (NAV and CVNI, Drawdown, Distributions, Fees, Expenses, etc.) and newly generated investor-level Fund Accounting data. At the DW foundation was a standard Star Schema which combined Fact Tables (by data level) with common SCD Dimensions.
  - The Star Schema model was extended to accommodate Dimension-Only reporting and snow-flake or profile type details.
  - Dimension Bi-Temporal design allowed for “as of Now” and/or “as of point of time” reporting.
  - Designed and implemented Automated Fact Tables Transformations to accommodate Fund Investor Splits and Merges. System handles this via Reporting Solution and Historical transformations via Data Solution with Audit Trail.
  - Designed and implemented the DW loads infrastructure (custom ETL) to deliver *FACTS*-generated data to DW for reporting. The infrastructure allows for near-real time data delivery.
  - Lead design and implementation of DB maintenance jobs, including Mat view Refresh, DB tables, partitions, indexes and space maintenance for ODS and DW.
  - Designed and coded inter-system communication interfaces between subsystems. Designed structures for incremental DW Dimensions update by ETL. Designed and implemented ETL jobs in IBM Data Stage.
  - Provided input, guidance and support to BO reporting team in defining UNIVERSE for DW and structuring queries and reports. Ensured that different flavors of reporting are available for Ad-hoc power users: “As of Point of Time”, “Dim as of now”, “Dim as of History”...
- Initiated, coordinated and lead development and deployment of the Data Model, database Objects, Back-End code enhancements and new functionality, reflecting on-going changes for existing and new clients.
- Lead team in design, implementation and rolling out a new Calculation Engine Platform (ORACLE, PL/SQL, XML, JBOSS, Micro Services, JAVA, and PYTHON) which provided the system with significant flexibility in quickly on-boarding new clients, while reducing the amount of new coding required. It greatly enhanced reusability of components and simplified implementations of client-specific Waterfall Calculations. The platform reduced the time required to on-board new clients significantly.
- Participated in functional requirements analysis/design sessions for upgrading Fund Accounting Platform to meet the evolving business needs of the existing funds and to on-board New Clients.
- Lead the SDLC cycles including QA/UAT test results analysis and PROD release planning.
- Participated in formal SCRUM Team as developer and/or SME. Wrote clear Stories, Tasks and Acceptance criteria for re-factoring efforts.
- Provided Client Business support 24X7. Collaborate with users and Prod Support Team on problems analysis and resolution.
- Analyzed Web GUI and Calc Engine performance to identify bottlenecks. Optimized system performance by tuning DB Queries and database backend PL/SQL code. Proposed and implemented DW enhancements for Financial Reporting performance.
- Partnered and cooperated with GUI and Reporting teams. Provided input, guidance and support in integration with DW and Calc Engine.
- Mentored new team members and assisted them in understanding the business and technology of the System.

**Sr. Technical Lead/Architect**  
**Morgan Stanley (New York, NY)**

**1999 - Feb 2012**

Principal architect of the Real Estate Fund Investor Level Sub Ledger, Calculations and Reporting system. Provided MS real estate controllers with an analytical and calculation tool for the MSREF family of Funds. Managed a team of onshore and offshore developers in re-engineering, implementation, enhancement and support of the system. Ensured stability, continuity, and consistency of the implementation. With minimal resources (3-6 people) scaled up Processing and Support from three funds to total of nine domestic and international funds, with ever increasing functionality, complexity of algorithms, and volumes of data, serving Funds with about \$10 billion of committed capital and assets under management.

Co-authored and patented the technology which was a key Intellectual Property asset acquired by State Street as part of the Fund Accounting transfer agreement.

2008 - 2012

- Collaborated with Fund Controllers to define, discuss and formalize evolving user and system requirements. Presented models and processed feedback. Acted as the liaison between the IT teams and the business in defining deliverables based on IT resource availability and client deadlines.
- Lead Data Modeling and implementation of Core GUI and Calculation Engine functionalities, Reference Database, and Reporting Data Warehouse (ERWIN) for the upgrade and re-engineering in ORACLE of the original SYBASE-based Real Estate Fund Investor Calculations and Reporting system to accommodate increasing business complexity and data volume of the Global Funds.

2000 - 2008

- Designed and implemented Databases and Back-End functionality for the Real Estate Fund Sub Ledger and Calculations Engine. Reviewed, discussed and clarified user and system requirements, formalized tech specs.
- Lead a team of 3 developers and managed all tech aspects of the system development and maintenance, which included GUI (C++), End-User Data Load Interface (custom EXCELL Data Loader, VB), Calculation Engine (SYBASE T-SQL) and reporting via Distributed Data Warehouse interface.
- Provided Sybase DBA support for development and production environments of the MS Financial Controllers division's global multi-tier Proprietary Distributed Data Warehouse hosting Equity Data, General Ledger, FX, REPOS, PNL, Balance Sheet, and multiple sub-ledgers, including ABACUS data.
- Developed and maintained ERWIN data models for the MS Proprietary Distributed Data Warehouse Data Marts, along with T-SQL and Unix Shell Scripts for cross platform ETL transfers. Maintained AUTOSYS Jobs. Monitored and troubleshoot data feeds. Maintained metadata for the Data Warehouse's Reporting Client.

1999 - 2000

- Executed application and database design and coding of the IT Inventory tracking system for Y2K Analysis and Remediation.

## Education

Graduated with honors Gubkin Russian State University of Oil and Gas, USSR.

**M.S., Maj.: Computer Science, Min.: Applied Mathematics**

## [Recent Trainings](#)

## Executive Linked-In Endorsements

- Business Analysis
- Attention to Details
- Technical Expertise

*Vlad has a unique ability to analyze both business and technical problems in a manner that always identified core issues and efficient solutions....*

**George Pillepich, Former SVP Client Business Solutions at State Street. Vlad's Former colleague, PO.**

- IT Expertise
- Product Knowledge
- Strong Work Ethic

*I worked with Vlad for 10 years. Each of those years my admiration for his IT skills and business knowledge has grown without fail ....*

**Joe Rago Former SVP Alternative Investment Services at State Street. Vlad's Former Manager.**

- Client Focus
- Domain Expertise
- Problem Solving

*Vlad was the bedrock of our engagement with the outsourced fund accounting provider ....*

**Maki Aruga, Former VP at State Street. Vlad's Former colleague, BA.**

SME for the Fund Accounting Platform.

Lead Architect of the Calc. Engine which improves on-boarding of new Real Estate clients.

Lead Developer of the Investor-level sub-ledger and calculation platform for the MSREF family of RE Funds.