

# ERIC LIVESAY

2609 Goose Lake Ct., Fort Worth, Texas 76177

Cell 858-361-6480 • elivesay@gmail.com

---

## SENIOR DATA AND AI ENGINEER

---

Seasoned Data Engineer with over 16 years of experience, known for driving business solutions through innovative problem solving and technical acuity. Demonstrates a strong knack for swiftly mastering emerging technologies and deploying them in the service of business efficiencies. Recognized for remarkable persistence. Valuable recent experience creating solutions using AI technologies.

### AREAS OF EXPERTISE:

|                         |  |
|-------------------------|--|
| Data Engineering        | Looker, Spark/PySpark, Vertica, Airflow, Tableau, Google Bigquery, SQL Server Analysis Services, SQL Server Integration Services, Microsoft Performance Point, Microsoft Reporting Services, Microstrategy Reporting Services, SAP Business Objects, NLP, Data Modeling, Kafka |
| Application Programming | Python, Postgres, SQL Server, Oracle pl-sql, PyQt  |
| Artificial Intelligence | PGVector, Sentence Transformers, BlipModel (vision), Embeddings, RAG (Retrieval Augmented Generation), NLP (Natural Language Processing), LLM's (Large Language Models), Prompt Engineering, Mistral LLM, Vertex AI, Bison LLM   |

---

### EDUCATION

**Bachelor of Science** – Computer Science

San Diego State University, California (12/2002)

---

### PROFESSIONAL EXPERIENCE

**Senior Data Engineer, Simpli.fi Holdings**, Fort Worth, TX

9/2015 – Present

Creating programmatic solutions for enabling reporting and analysis in a Big Data environment (billions of records). Data warehouse design and implementation using Vertica and Hadoop. Investigations and troubleshooting with SQL, Jupyter Notebooks with PySpark, and Kafka. Key achievements:

- Created a reporting solution that uses billions of records of data to show a dashboard that has been used to help gather client into the platform that had not been on board in years. This reporting tool helped to generate almost \$1 million in RFPs in a week's time.
- Currently building out two POC's (Proof of concepts) using AI models:
  - A "ChatZTV" concept: - Providing interactive answers to product questions and inline maps and tables of results using an LLM.
  - An 'Autotagger' using several AI Transformer based models and embeddings to tag video and image ads based on particular categories.

...Continued...

# ERIC LIVESAY

---

...CONTINUED

- Created a solution that makes it easy for us to load large third-party cookie/ segment files into Hadoop, along with their segment descriptions. We can easily add a new integration with just adding a configuration file.
- Created several innovative dashboards for showing Simpli.fi and Facebook data trends (both separately and side by side), and allows filtering on various date periods. The innovative Looker code I created behind the scenes also allows the user to select a metric, or multiple metrics that they want to plot in a dynamic chart.
- Lead the design and development of our Facebook / omni channel data mart and reporting in our data warehouse.
- Unprompted, took over handling a Spark ETL job that loads domains information from our Bidder data.
- Took the initiative to create a badge system user interface using PyQt which has a unique 'Dungeons and Dragons' feel and allows our developers to explore and start the badge training that has been created so far. The badges are currently stored in Jira and we wanted a better way to explore and interact with the badges.
- Took the initiative to mentor a couple junior members of the team.

**Data Engineer, HP** (DOD & NMCI- Navy and Marine Corps Intranet), San Diego, California  
6/2013- 9/2015

Re-hired back to the Data Engineering / Services team. I was hired as an SME for **SAP Business Objects**, and for the existing **Oracle** data warehouse and reporting implementation. I designed much of the existing BOSS (Business and Operational Support Solution) data warehouse tables and Universes. I will be able to leverage that knowledge for future data warehouse projects. Key achievements:

- Restored functionality to the development environment during several outages by leveraging my knowledge of the existing solution to bring up critical services and restore key files for users.
- Completed two refreshes of the Business Objects environment in the development lab so that the production and development environments more accurately match each other and new development could progress in the development lab.
- Assisted with several production outages by providing technical expertise and understanding of the solution architecture to resolve issues.

**Business Intelligence Engineer** (Genoptix, a Novartis Company), San Diego, California 5/2011 – 6/2013

Duties included: Performed relational and dimensional cube **database design, development, and optimization** in development, test, and production data warehouse environments, with a focus on dimensional **star-schema** design techniques. Recommended architectural designs, enhancements and solutions to optimize reporting and other analytical goals. Created **stored procedures, triggers, views, constraints, indexes, SSIS (SQL Server Integration Services) packages, and SSAS (Sql Server Analysis Services) cubes**. Created **SQL Server Reporting Services (SSRS)** reports and **MDX (SSAS) queries**. Key achievements:

# ERIC LIVESAY

---

...CONTINUED

- Created a role-based dynamic security solution for our Sales team which works with the SSAS cubes and is integrated with **(AD) Active Directory**.
- Created a solution to synch AD group memberships with our sales management database using **PowerShell** and SSIS. These two solutions, together with the dynamic security mentioned above, allow our sales team of 100 personnel to view reports and only see the data pertaining to their particular sales area or areas of responsibility.
- Took the initiative to create a Business Intelligence department **wiki** page, which allows us to have an easily maintainable and available place to document **data warehouse standards** and procedures.
- Created a backup solution using PowerShell and **XMLA** to automate backing up the SSAS database.
- Used an advanced while loop based technique in SSIS to overcome an issue sending out automated **SharePoint** updates and alerts to the Business Intelligence home page when the **ETL (extract, transform, and load)** completed loading the data warehouse. The complete solution allows our users to automatically be kept up to date with the freshness of the data in the data warehouse and SSAS cubes, as well as notifying the currently on call engineer via **txt message** of failures or successes on a daily basis.
- Provided several training sessions, teaching, and documentation for the users on how to use our Business Intelligence tools, including: **Excel pivot tables**, **Strategy Companion Analyzer**, various SSRS reports, as well as how to create **subscriptions** for these reports.
- Became a key contributor in writing MDX queries to get data out of our cube solution.
- Took the initiative to create usage reports for our SSRS instances to audit which users are actually using them.

**Data Engineer, HP** (DOD & NMCI- Navy and Marine Corps Intranet), San Diego, California  
6/2008 – 05/2011

Duties include creating Business Intelligence solutions using the following languages and tools: Sql programming and database design (using **Microsoft t-sql** and **Oracle pl sql**), **SQL Server**, **SSAS (Sql Server Analysis Services)**, **Microsoft Performance point**, **Microstrategy Reporting Services**, **Microsoft Reporting Services (SSRS)**, **SAP Business Objects**. Data integration with the use of **SSIS (SQL Server Integration Services)**. Reporting portal design using **Asp .Net**, **ASP**, **SSRS Web services**. Reporting automation using **SSRS subscriptions**.

- Became the 'Go to' guy for business intelligence in the group I am in, as well as having been able to help others outside of my group with BI initiatives.
- Played a key-role in overcoming integration hurdles for the latest business intelligence solution to support the internal Navy infrastructure, which is being used for enterprise historical reporting. Key challenges met were:
  - Created the architecture and initial design for the Enterprise Service Management Data warehouse based on the enterprise requirements. Took the initiative to give direction and instruction to other team members on how to setup the business intelligence architecture.
  - Created a SSO (Single-Sign-On) solution to integrate with HP Decision Center (Data Warehouse with ITIL based front-end) that meets government security regulations using CAC card enforcement.

# ERIC LIVESAY

---

...CONTINUED

- Provided expertise in SQL Server Integration Services package configuration to create a robust method for configuring the automated packages for ETL (extract, transform, and load).
- Worked extensively with SQL Server Analysis services, SQL Server Reporting Services, PerformancePoint, Microstrategy, as well as Business Objects universes and report designs. Used the tools to create custom cubes, reports, and dashboards that allow the enterprise data to be visualized across multiple dimensions
- Provided a valuable role in training team members on how the data warehouse and reporting solution works.
- Development of the materialized views, stored procedures, functions, table and database design necessary for reporting and moving the data, both in Oracle and in Microsoft t-sql

**Solutions Engineer**, Kintera, Inc., San Diego, California

12/2006 – 5/2008

Provided engineering development, support, and expertise in custom software integrations and data migrations (software as a service support). Utilized **C#, ASP .Net, ASP (classic), MS SQL 2000 & 2005**, to develop custom solutions for clients. Integrations consisted of 'modules' written in C# for periodic synchronization with client's databases via flat files. Created windows services, c# 'plugin' modules, as well as **Microsoft Reporting Services** reports. Utilized **web services, MS SQL Server stored procedures, functions, scripts and tables** to support the client integrations.

**Key Contributions:**

- Designed and developed numerous Microsoft SQL Server 2000 and SQL Server 2005 stored procedures, functions, and tables to support custom software integrations and reports for clients.
- Developed several custom reports utilizing Reporting Services 2000 for various clients.
- Took the initiative to implement a web-based monitoring application to monitor all of the integrations with other companies.
- Greatly improved team rapport and effectiveness by initiating dialogues amongst the various team members regarding the technologies being implemented.
- A few of the many clients I provided software as a service development support for were: Nashville Area Red Cross, Parents As Teachers Association, La Leche League International, Wounded Warrior Project, Arthritis Foundation, and National Association For the Deaf.

**Programmer (Contract)**, Commonwealth Financial Network, San Diego, California 9/2006 – 12/2006

Designed, created, programmed, and tested **Outlook Add-In** and accompanying custom form. Programmed button to open custom form with **VB .NET**, and **Visual Studio Tools for Office 2005 SE**. Used **VBscript** to program form to send email with scheduling information to necessary personnel and schedule conference room mailboxes.

**Key Contributions:**

# ERIC LIVESAY

---

...CONTINUED

- Initiated using Outlook Add-In when original scheme used a macro that could pose possible security problems and other toolbars to be removed or overwritten.
- Created .msi file and installation script for company deployment.
- Form forces user to fill out information, and creates attendees as resources, so that direct booking in Exchange 2000 can be used.

**Programmer (Contract)**, Enchanted Realms, LLC, San Diego, California 9/2006-12/2006

**Client / Server programming** for real time strategy/ first person shooter online role playing game. Utilized **c**-based Torque Game Engine and cs files to implement client players to 'jump' to other servers.

**Key Contributions:**

- Performed a key role in the implementation of technology to move players between servers.

**Helpdesk Analyst (Contract)**, Hansen Quality, San Diego, California 4/2006 – 9/2006

Production support of order processing system including website, exchange folder monitors, automated transactions, etc. Escalation to engineering or programmers as necessary. Internal support of end users. **Citrix**, **VPN system**, hardware and software build supported through **Active Directory**. Worked with **VBA** to complete more complex tasks as necessary.

**Key Contributions:**

- Created Excel macro using VBA to enable renaming and copying of hundreds of pdf's at once for Capital Markets group.
- Created Outlook Message Templates for System Maintenance messages and System Interruption messages.

**IT Systems Support III**, Remec (Powerwave Technologies), Poway, California 11/2004 – 4/2006

Supported internal users through troubleshooting desktop and system problems. Escalated issues, if necessary, to network resource or programmer for resolution. Coordinated resolution process with internal user. Conducted and administered various termination processes due to Powerwave buy-out of Remec, with subsequent dismantling of Remec components — disabled accounts, performed imaging of used hardware to be stored, and removed users' mailboxes. Maintained PC and laptop hardware inventory for San Diego area facilities. Performed Business Applications Help Desk Analyst duties with **Baan ERP** and **Crystal Reports**.

**Key Contributions:**

Served as Business Applications Help Desk Analyst, which consisted of Baan ERP role administration, some crystal reports user account support, and some eportfolio user account support

**Client Support Analyst (Contract)**, Memec, San Diego, California 11/2003 – 11/2004

Provided 1<sup>st</sup>-level support for entire IT infrastructure consisting of in-house ERP system, nationwide network, **Citrix**, **Outlook**, desktops/laptops, **JDE**, and **Nortel VPN**. Managed queue of tickets as member of 6-person helpdesk team using the **Footprints** system. Ran **SQL queries** for in-house ERP system. Used **VBA** and **VB .NET** when necessary to perform user profile cleanup.

**Key Contributions:**

# ERIC LIVESAY

---

...CONTINUED

- Created and ran SQL queries for in-house ERP system.
- Created 'wrapper' object for internet explorer website for WebEx player which enabled cleaning of excess WebEx files from profiles.

**Web Designer / Programmer**, Ckgsolutions, San Diego, California

6/2005 – 12/2006

Created and edited web page for computer repair company ([www.ckgsolutions.com](http://www.ckgsolutions.com)) using **ASP (classic)**, **HTML**, and **JavaScript**. **Search engine optimization** for company on google, webcrawler, and other search engines.

**Key Contributions:**

- Search Engine optimization allowed company to be one of the top Google results for San Diego laptop repair.

***Early Work History & Experience concurrent w/Education (10/96–4/03)***

*Contributing member of the S.D.S.U. Robocup soccer team (robot soccer) – work involved GUI interface programming as well as research into parallax error correction. Additional excellent experience using GIS mapping applications to perform map layering and analysis.*

- Manipulated Bugzilla code (Perl script) to meet company's needs for configuration management.