Social media with a little help of AI

Heli Helskyaho, Jari Laine

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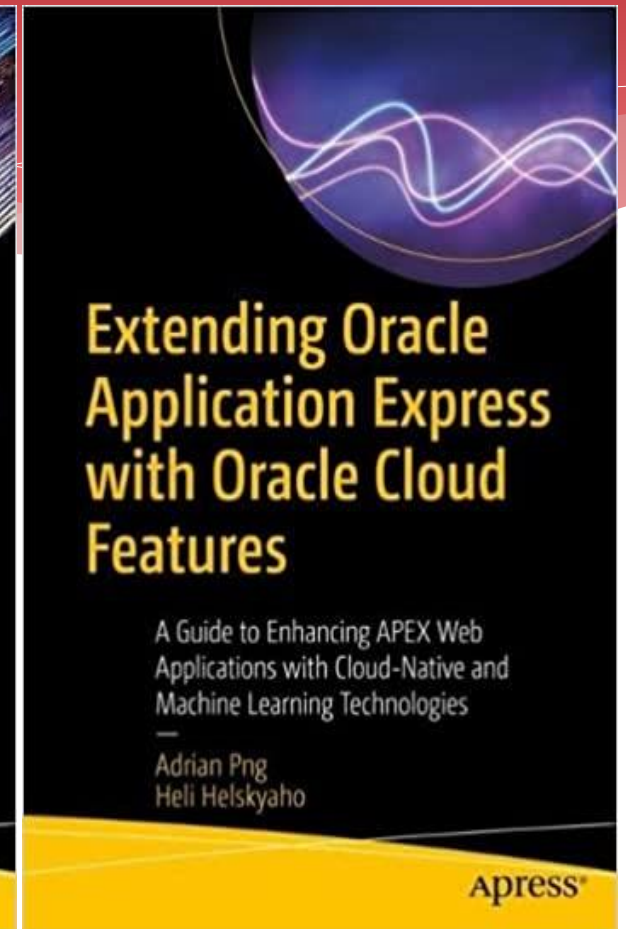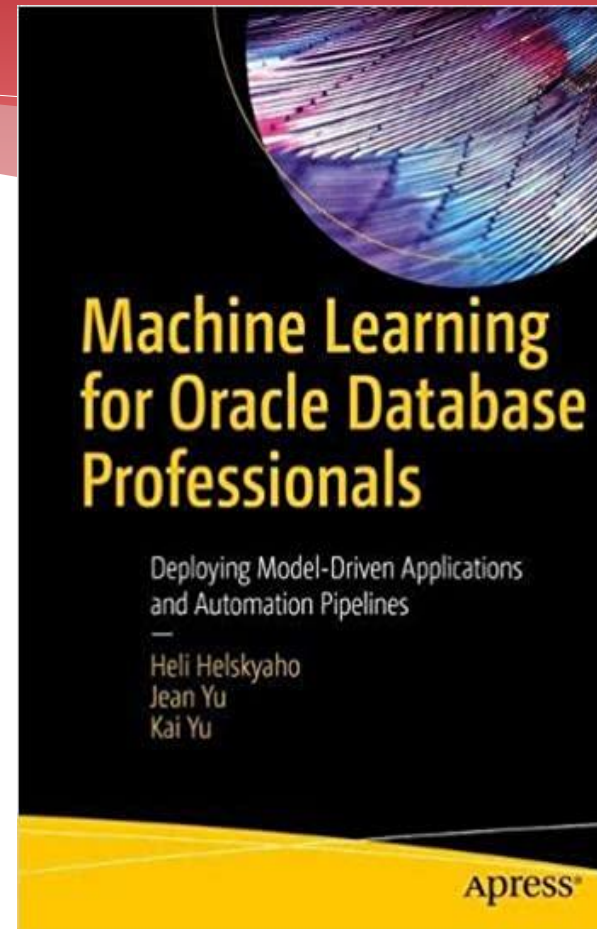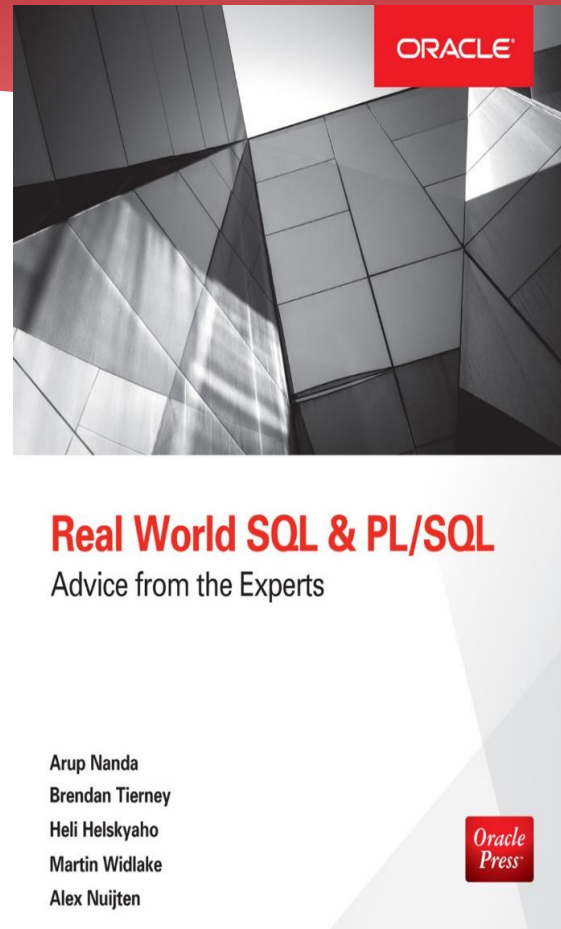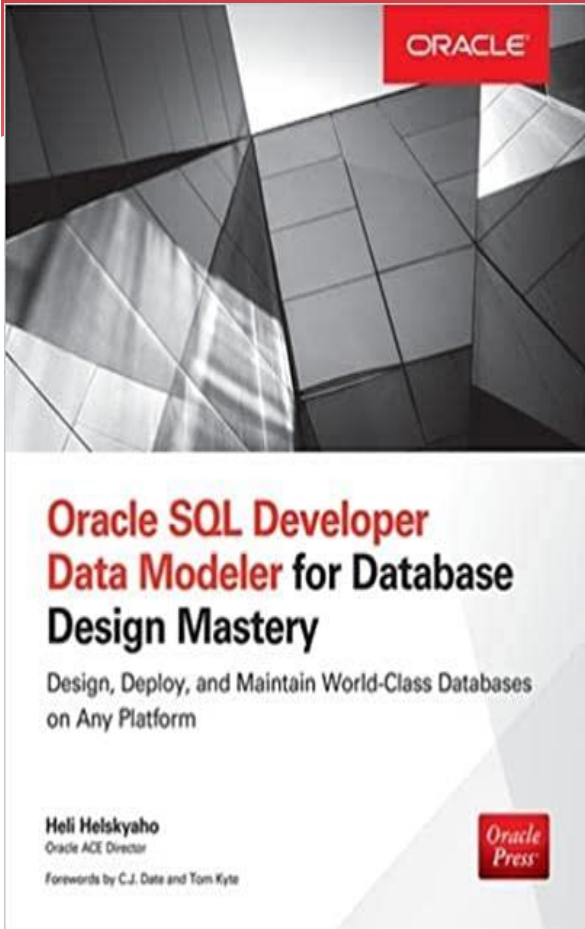
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Heli

* Graduated from University of Helsinki (Master of Science, computer science), currently a doctoral student at University of Helsinki
* Worked with Oracle products since 1993, worked for IT since 1990
* Data and Database!
* CEO for Miracle Finland Oy
* Oracle ACE Director
* Public speaker and an author
* Author of the book Oracle SQL Developer Data Modeler for Database Design Mastery (Oracle Press, 2015), co-author for Real World SQL and PL/SQL: Advice from the Experts (Oracle Press, 2016), Machine Learning for Oracle Database Professionals: Deploying Model-Driven Applications and Automation Pipelines (Apress, 2021), and Extending Oracle Application Express with Oracle Cloud Features: A Guide to Enhancing APEX Web Applications with Cloud-Native and Machine Learning Technologies (Apress, 2022)

Books

ORACLE

Oracle SQL Developer Data Modeler for Database **Design Mastery**

Design, Deploy, and Maintain World-Class Databases on Any Platform

Heli Helskyaho
Oracle ACE Director

Forewords by C.J. Date and Tom Kyte

Oracle Press

ORACLE

Real World SQL & PL/SQL
Advice from the Experts

Arup Nanda
Brendan Tierney
Heli Helskyaho
Martin Widlake
Alex Nuijten

Oracle Press

Machine Learning for Oracle Database Professionals

Deploying Model-Driven Applications and Automation Pipelines
—
Heli Helskyaho
Jean Yu
Kai Yu

Apress

Extending Oracle Application Express with Oracle Cloud Features

A Guide to Enhancing APEX Web Applications with Cloud-Native and Machine Learning Technologies
—
Adrian Png
Heli Helskyaho

Apress

Jari

* Creator of the blogging application
* Jari Laine works as a consultant for Miracle Finland Oy
* Jari has been working with Oracle Application express (APEX) since 2006
* He has developed, for example, Data Quality and Master Data Management (MDM) applications using APEX for a major telecom company
* He has a strong background of data warehousing and ETL/ELT
* Jari became an Oracle Certified APEX Developer in 2011 and has acquired several other Oracle certificates after that

The problem

Writer's block

* We love to share our knowledge but that requires a lot of writing
* And writing takes a lot of time….
* Blogs, LinkedIn posts, emails, articles, books,…
* How to get started?
* A blank canvas…
* Help the process with machine learning and/or AI!
* It is easy!

Blogging with ML and AI

* BTW the whole blog runs in the Oracle Cloud in an Autonomous Database and is built using APEX

* Demo

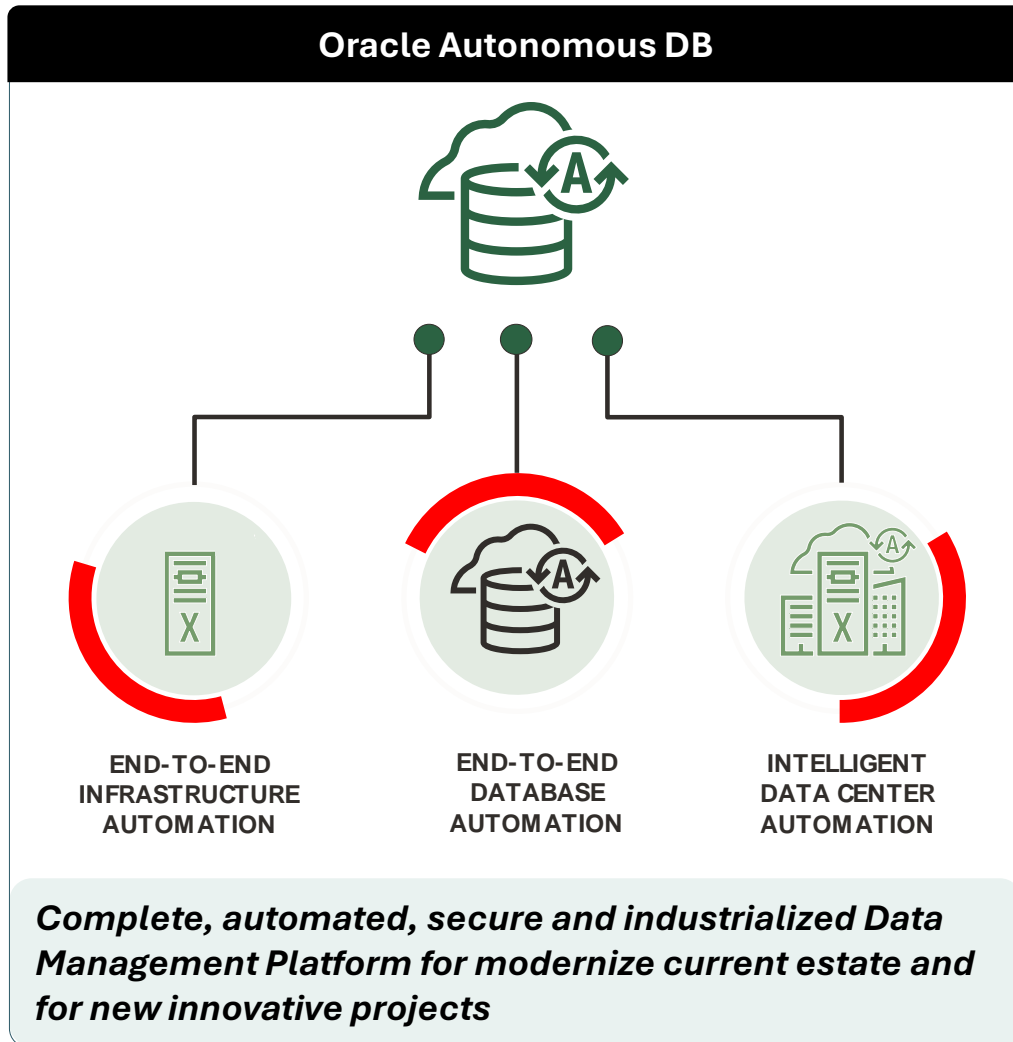# Creating a blog post

* Demo

Comments

* Demo

Key takeaways of the solution

* A solution built in 2009 (on-premises) was easily migrated to OCI and Autonomous Database in 2019
* The selected solution worked well
  * Oracle Autonomous Database
  * APEX
  * AI Services
* The productivity increase was huge
  * Hours of desperate thinking -> minutes of work

Technology chosen

* Oracle Autonomous Database (in the Oracle Cloud)
* APEX
* OCI AI Services

Oracle Autonomous Database

Oracle Autonomous DB Technology

Oracle Autonomous DB

END-TO-END INFRASTRUCTURE AUTOMATION

END-TO-END DATABASE AUTOMATION

INTELLIGENT DATA CENTER AUTOMATION

Complete, automated, secure and industrialized Data Management Platform for modernize current estate and for new innovative projects

Key characteristics

- Simplify data management
- Better data reliability
- Much easier to get better performance

- Data is safer and always available
- Less efforts and errors to serve Business
- Lower costs

Self-securing

Protection from malicious internal and external attacks
+
Security updates and patches at runtime
+
Automatic Data Encryption

Self-driving

Auto-monitoring, predictable performance, self-tuning capabilities
+
Less labor, no human errors
+
Elastic Sizing

Self-repairing

Always be online: automatically detects and applies corrective actions to ensure nonstop access to your data
+
SLA experience

APEX

* A low-code application development platform
* Integrates "everything" together!
* In the Oracle Database
* Without any extra costs

AI Services

* Pre-trained models
* For a specific use case
* Trained and maintained by Oracle
* Use with your own data
* Train (customize) with your own data

Search resources, services, documentation, and Marketplace

Search

🖳 Analytics & AI

Home

Compute

Storage

Networking

Oracle Database

Databases

Analytics & AI

Developer Services

Analytics

Analytics Cloud

Data Intelligence

Data Lake

Big Data Service

Data Catalog

Data Integration

Data Flow

Messaging

Streaming

Connector Hub

Machine Learning

Data Science

Data Labeling

AI Services

Generative AI

Language

Speech

Vision

Document Understanding

Digital Assistant

Media Services

Media Flow

Media Flow Jobs

Language

Language

* Demo

Speech

Speech

- **Overview**
- Transcription jobs
- Live transcribe
- Customizations

Overview

Get Started

Speech can be used to transcribe customer service calls, automate subtitling, and generate metadata for media assets to create a fully searchable archive.

👁

Speech Transcription

Get Started

Speech

Speech Transcription

You can transcribe one or more media files to create a text file. Try it out by clicking Create job.

Create job

Documentation

Speech features

All documentation

Quota and limits

Vision

Cloud Classic >

Search resources, services, documentation, and Marketplace

Search

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Compute

Storage

Networking

Oracle Database

Databases

Analytics & AI

Developer Services

🖳 Analytics & AI

Analytics

Analytics Cloud

Data Intelligence

Data Lake

Big Data Service

Data Catalog

Data Integration

Data Flow

Messaging

Streaming

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Vision

* Demo

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Vision

Vision

Extract insights from visual data

Use Oracle Cloud Infrastructure Vision for image recognition tasks like classifying images, detecting objects, detecting faces, and extracting text. Either leverage pretrained models or easily create custom models for industry and customer specific scenarios. Vision service is a fully managed, multi-tenant, native cloud service that helps you with all your common computer vision tasks.

Watch service tour

Get started

Video tours

Overview

Essentials

Vision overview

Policies for Vision

Resources

Self-paced workshop

Documentation

Frequently asked questions

Oracle Cloud Customer Connect

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Data Labeling

Labeled data

* Needed for Supervised learning
* Labeling is identifying properties (labels) for images/text data and annotating (labeling) them with those properties
* Single/multiple labels
* The data labeled can be used with AI Service Custom models

OCI Data Labeling Service

* Images
  * Classification, object detection,…
* Text (evaluations, feedback,…)
  * Classification, highlighting words or span of words within a text (can be used to train a custom NLP model)
* Documents (PO, Invoice, Receipt,…)
  * Classification

Shortcuts   Clear annotations   Skip   Save   Save & next   Cancel

Labels (4)   ⊕ Label

🔍 Search label

☐ mouth (0)
☐ nose (0)
☐ eyes (0)
☐ coffeemug (1)

Generative AI

Generative AI

* Demo

AI across the Oracle Cloud ecosystem

Applications

Fusion Applications	NetSuite	Fusion Analytics	Industry Applications	3rd Party Applications

AI Services

OCI Generative AI (NEW)	OCI GenAI Agents (NEW)	Digital Assistant	Speech	Language	Vision	Document Understanding

Data Platforms

OCI Data Science	AI Vector Search in Oracle Database	MySQL HeatWave Vector Store	OCI Data Labeling

Data

AI Infrastructure

Compute bare metal instances and VMs with NVIDIA GPUs	OCI Supercluster with RDMA networking	Block, object, and file storage; HPC filesystems

Oracle AI Partners

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Posting to LinkedIn with ML and AI

* Demo

Conclusions

* Automation helps a lot!
* Machine Learning and AI are easy with APEX
* Rapid application development with APEX: something to show very fast

THANK YOU!

QUESTIONS?

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