



25 FEBRUARY 2026

# TO AI, OR NOT TO AI: THAT IS THE QUESTION: PRACTICAL APPLICATIONS OF NUIX AI COGNITIVE, SEMANTIC, AND GENERATIVE IN ACTION



**Dario Beniamini**

Pre-Sales Engineer

Nuix

PREPARED FOR

**DIC** DIGITAL  
INVESTIGATIONS  
CONFERENCE

# ABOUT THE **SPEAKER**



## **Pre-Sales Engineer**

Previously Nuix EDU partner and external consultant, Senior Solutions Consultant. Nuix's customer since 2018.



18 Years working within Cyber Security, DFIR, OSINT, Competitive Intelligence, Fraud and Brand Protection investigations. Consultant roles in various international consultancy firms.



Certified trainer for EJTN, CEPOL, Italian Ministry of the Interior, and Certified Instructor Candidate at the SANS Institute for the SEC497: Practical Open-Source Intelligence (OSINT) course.



BS in Management Engineering and Master's degree in Fraud and Operational Risk.  
GCFA, GCFE, GOSI, CIFI, CFIP,  
ISO/IEC 27001 Lead Auditor/Implementer.

# AGENDA

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**01 SEMANTIC AI**  
FINDING WHAT YOU MEAN

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**02 GENERATIVE AI**  
FROM DATA OVERLOAD TO INTELLIGENCE

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**03 COGNITIVE AI**  
ENRICHING DATA WITH INTELLIGENCE

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**04 AI FUNNELING**  
THE STRATEGIC ADVANTAGE

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# IS THIS SIMILAR TO YOUR SITUATION?

<b>Your Role</b>	<b>Senior Digital Forensics Investigator / Compliance Officer</b> <i>Financial Services, Government Regulators, Law Enforcement</i>
Critical Business Issue	<i>Unable to respond to internal investigations quickly enough; regulatory exposure increasing; evidence defensibility questioned in legal proceedings.</i>
Current State	<b>Unable to complete investigations within regulatory deadlines while maintaining accuracy and defensibility</b>
Current State Problems	<ul style="list-style-type: none"><li>• 10TB+ datasets taking weeks to process manually</li><li>• Investigation backlogs growing 30% year-over-year</li><li>• Staff overwhelmed by data volume</li><li>• Keyword searches miss 60-70% of relevant evidence (synonyms, euphemisms, cross-language content)</li><li>• Manual document review consuming 80% of investigation time</li><li>• Unable to identify patterns across unstructured data at scale</li></ul>
What You Need	<b>AI capabilities that accelerate investigations while maintaining forensic integrity</b>
The Value	<b>Complete investigations 90% faster with 40% fewer staff hours while improving evidence quality</b>

01

# SEMANTIC AI

FINDING WHAT YOU MEAN

Keywords and NQL search... Search Reset

Hide Immaterial AND Text: Me comí mi trabajo y necesito ...

text-semantic:"Me comí mi trabajo y necesito más dinero."~0.9

Metadata Profile: Search Default Sort results by: Relevancy

**Search Filters**

Kinds, Tags, Mobile Searches, Nuix Neo Inve

- Kinds
  - Chat Conversations
  - Chat Messages
  - Containers
  - Documents
  - Drawings
  - Email
  - Images
  - Multimedia
  - Spreadsheets
  - System Files
  - Unrecognised
- Tags
- Mobile Searches
- Nuix Neo Investigations
  - Targeted Queries
  - Enrich Results
  - Documents
  - Communications
  - Internet
  - Mobile
  - Organiser

Coding	Score	Name	File Type	Item Date	File O...	Path Name
<input type="checkbox"/>	0.935	2024-07-26 8_22_4...	Chat Message	2024-07-26 18:22:49		/Evidence 1/Mobile/text_...
<input checked="" type="checkbox"/>	0.932	2024-07-26 8_14_4...	Chat Message	2024-07-26 18:14:49		/Evidence 1/Mobile/text_...
<input type="checkbox"/>	0.926	2024-07-26 8_13_4...	Chat Message	2024-07-26 18:13:49		/Evidence 1/Mobile/text_...
<input type="checkbox"/>	0.924	Re: Thinking About...	RFC822 Email Message	2024-07-17 06:22:11		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.924	2024-07-26 8_21_4...	Chat Message	2024-07-26 18:21:49		/Evidence 1/Mobile/text_...
<input type="checkbox"/>	0.924	2024-07-25 19_19_...	Chat Message	2024-07-26 05:19:49		/Evidence 1/Mobile/text_...
<input type="checkbox"/>	0.923	2024-07-26 01_39_...	Chat Message	2024-07-26 11:39:49		/Evidence 1/Mobile/text_...
<input type="checkbox"/>	0.923	Re: Taking Sick Lea...	RFC822 Email Message	2024-07-12 21:00:00		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.923	Re: Thinking About...	RFC822 Email Message	2024-07-17 06:22:11		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.922	Re: Financial Troub...	RFC822 Email Message	2024-07-12 21:00:00		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.921	Client Feedback	RFC822 Email Message	2023-01-12 00:20:00		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.921	Thinking About Ret...	RFC822 Email Message	2024-07-17 06:22:11		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.921	Financial Trouble A...	RFC822 Email Message	2024-07-12 18:00:00		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.921	Customer Complaint	RFC822 Email Message	2023-01-16 08:10:00		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.921	Holiday Schedule	RFC822 Email Message	2023-01-05 00:30:00		/Evidence 1/XcorpBank_E...
<input type="checkbox"/>	0.921	New Hire	RFC822 Email Message	2023-01-07 00:30:00		/Evidence 1/XcorpBank_E...

2024-07-26 8\_14\_49\_ [215-877-88...]

2 of 2 participants

Select all

Years

215-877-8865 • 7/26/2024 18:14:49

Yes - I have crazy bills and need to get out of this job.

To +36 20 321 7821

+36 20 321 7821 • 7/26/2024 18:15:49

OK - Larry says you work as XcorpBank.

To 215-877-8865

215-877-8865 • 7/26/2024 18:16:49

Yes.

To +36 20 321 7821

+36 20 321 7821 • 7/26/2024 18:17:49

In the IT Department

To 215-877-8865

215-877-8865 • 7/26/2024 18:18:49

Yes.

Download

Keywords and NQL search... [Search] [Reset]

Image: documentos de identidad co... AND Images image-semantic:"documentos de identidad como contraseña e identificación"~0.6

Blur images: [Toggle] Filter by: Select options to filter Sort results by: Relevancy

### Search Filters

Kinds, Tags, Mobile Searches, Nuix Neo Inve

- Kinds**
  - Chat Conversations
  - Chat Messages
  - Containers
  - Documents
  - Images
  - Multimedia
  - System Files
  - Unrecognised
- Tags**
- Mobile Searches**
- Nuix Neo Investigations**
  - Targeted Queries
  - Enrich Results
  - Documents
  - Communications
  - Internet
  - Mobile
  - Organiser
  - Locations
  - Multimedia
  - Case Management

image10.jpeg




image6.jpeg




image3.jpeg




image2.jpeg

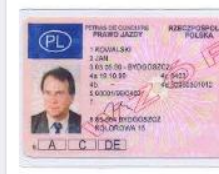


image4.jpeg



image11.jpeg




image5.jpeg




image8.jpeg




image5.jpeg



image2.jpeg




image9.jpeg




image1.jpeg




image8.jpeg



Metzheizer

Metzheizer AND Hide Immaterial AND Image: hospital

image-semantic:"hospital"~0.6

Metadata Profile: Search Default | Sort results by: Relevancy

### Search Filters

Kinds, Tags, Mobile Searches, Nuix Neo Inve

- Kinds
  - Chat Conversations
  - Chat Messages
  - Containers
  - Documents
  - Images
  - Multimedia
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  - Enrich Results
  - Documents
  - Communications
  - Internet
  - Mobile
  - Organiser
  - Locations
  - Multimedia
  - Case Management

Coding	Score	Name	File Type	Item Date
<input type="checkbox"/>	2.308	2025-07-11_14-...	MPEG-4 Video File	2025-07-11

No items selected | 1 of 1 Pages | Showing 1 - 1 of 1 items

2025-07-11\_14-19-57.mp4

**Image cannot be displayed.**

The selected image exceeds the Default Preview's configured maximum file size of 100 MB and cannot be displayed. Click Download to view the image locally or contact your administrator.

Download

### Item Metadata

2025-07-11\_14-19-57.mp4

Path Name: /Evidence 1/Surveillance

PhotoDNA Robust Hash

Physical File: true

Poisoned: false

Position: 0-3-0

Preview Text: Yes. Yes. Yes. Yes. Yes. Yes. Yes. Yes....

Printed Image Generation Method

Printed Image Page Count

**Preview Text:**

Yes. Yes. Yes. Yes. Yes. Yes. Yes. Yes.  
 Jó, kívánc Dan Metzheizer, és Kuján Fárd, a kustatot.  
 -Sóan nem fog. -Sóan nem fog. -Sóan nem fog. -

02

# GENERATIVE AI

FROM DATA OVERLOAD TO INTELLIGENCE

Keywords and NQL search... Search Reset

Hide Immaterial AND GenAI

Metadata Profile: GenAI/GenAI Default Sort results by: Relevancy

**Search Filters**

Kinds, Tags, Mobile Searches, Nuix Neo Inve

- Images
- Multimedia
- Spreadsheets
- System Files
- Unrecognised

**Tags**

- Automate
  - Analyzed Items
    - 2nd Pass
    - 3rd Pass
    - GenAI
  - Failed Items
  - System
- ClusterRuns
  - To KG

Mobile Searches

Nuix Neo Investigations

- Targeted Queries
- Enrich Results
- Documents
- Communications
- Internet

Coding	Name	GenAI GenAI Privi...
<input type="checkbox"/>	Dinner Plans at Arby's	No
<input type="checkbox"/>	Dreaming Big: Cars, Boats, and Travel	No
<input checked="" type="checkbox"/>	Book1.xlsx	Yes
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No
<input type="checkbox"/>	Budget Update	No
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No
<input type="checkbox"/>	Performance Review	No
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No
<input type="checkbox"/>	Training Session	No
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No
<input type="checkbox"/>	Client Feedback	No
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No
<input type="checkbox"/>	Meeting Recap	Undetermined.
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No
<input type="checkbox"/>	Team Building	No
<input type="checkbox"/>	Re: Dreaming Big: Cars, Boats, and Travel	No

No items selected | 1 of 65 Pages | Showing 1 - 50 of 3,225 items

**Book1.xlsx**

Sheet1

Customer Database

Ref	Client Name	Address	Sort Code	Account Number	Credit Card
00001	Phil Timms	23 summer gardens,,East molesey,Surrey,Kt89lt	200012	45892354	5434 1288 9956 1234
00002	Frank Johnson	13 high street, Bracknell, Berks,Bg1 3gh	400107	98354546	4678 3456 1234 7451
00003	Fran Murphy	64 Dornton Road Balham london SW12 1GE	302456	23458717	3989 0796 6879 3869
00004	Oliver Thompsn	6 london road Kingston Surrey Kt1 8th	205678	67345211	5678 3456 9672 4738
00005	T Smith	78 Stirling Road Manchester M7 9ws	402015	56793205	6784 4569 3456 1248
00006	Holly Twiss	14 New Road,leatherhead,Surrey,Kt19 5gh	301020	50679213	4678 3456 1234 7890
00007	Phil Timms	23 summer gardens,,East molesey,Surrey,Kt89lt	200012	45892354	5434 1288 9956 1234
00008	Frank Johnson	13 high street, Bracknell, Berks,Bg1 3gh	400107	98354546	4678 3456 1234 7451
00009	Fran Murphy	64 Dornton Road Balham london SW12 1GE	302456	23458717	3989 0796 6879 3869
00010	Oliver Thompsn	6 london road Kingston			

Download

**Item Metadata**

Book1.xlsx

GenAI/GenAI Default

Sort By: Alphabetically (A - Z)

**GenAI**

- GenAI
  - Fraud: Undetermined
  - Private: Yes
  - Privilege: Yes
  - Risk: The document risk level is 3, which ...**
- System
  - Error
  - Model: gpt-4-turbo-preview
  - Service: openai.com
  - Warning

Name: Book1.xlsx

**Risk:**

The document risk level is 3, which indicates a high risk. This assessment is based on the presence of personally identifiable information (PII) including client names, addresses, sort codes, account numbers, and credit card information without any evident redaction or anonymization. This type of information is highly sensitive, and if misused or exposed, it could lead to significant

# Operations

- 1. Configure Parameters
- 2. Configure Gen AI Connection
- 3. Script  
Script to receive parameter passed by the Webhook
- 4. Use Case
- 5. **Gen AI Prompt On Documents**  
Prompt on Privilege, Private, Fraud and Risk
- 6. Gen AI Prompt On Documents  
Summarize text
- 7. Tag Items

## Gen AI Prompt On Documents

+ - Question prompts

Name	Prompt
GenAI  Privilege	Does the document contain privileged information? Answer with Yes, No or Undetermined.
GenAI  Private	Does the document contain private information? Answer with Yes, No or Undetermined.
GenAI  Fraud	Does the document indicate that a fraudulent activity was committed? Answer with Yes, No or Undetermined.
GenAI  Risk	What's the document risk level, between 0 to 3, where 0 is no risk and 3 is high risk? Answer with only the number, 0, 1, 2, or 3.

- Clean up prompt response
- Parse JSON output
- Output JSON schema
- Use follow-up prompts

03

# COGNITIVE AI

ENRICHING DATA WITH INTELLIGENCE

Keywords and NQL search... Search Reset

(nlp:"model.defaultModel.skillssets.Busin... AND Hide Immaterial

Metadata Profile: Search Default Sort results by: Relevancy

### Nuix Enrich Filters

- Dictionaries
- Risks
- Skill Sets

Relevancy: 0.9  1

- Business Operations
  - Affiliate Agreement
  - Assignment Agreement
  - Brokerage Agreement
  - Business Requirements Document
  - Contract Manufacturing Agreement
  - Feasibility Study
  - Health and Safety Policy
  - Implementation Plan
  - Invitation for Bid
  - Online Advertising Agreement
  - Patent License Agreement
  - Project Proposal
  - Referral Agreement
  - Request for Proposal
  - Request for Quotation
  - Reseller Agreement
  - Software Requirements Document
  - Statement of Work
  - Status Report

Coding	Name
<input type="checkbox"/>	SteelVaultCorp_20081224_10-K_EX-10.16_3074935_EX-10.16_Affiliate Agre...
<input type="checkbox"/>	SouthernStarEnergyInc_20051202_SB-2A_EX-9_801890_EX-9_Affiliate Agre...
<input type="checkbox"/>	SouthernStarEnergyInc_20051202_SB-2A_EX-9_801890_EX-9_Affiliate Agre...
<input type="checkbox"/>	SteelVaultCorp_20081224_10-K_EX-10.16_3074935_EX-10.16_Affiliate Agre...
<input type="checkbox"/>	UsioInc_20040428_SB-2_EX-10.11_1723988_EX-10.11_Affiliate Agreement ...
<input type="checkbox"/>	UsioInc_20040428_SB-2_EX-10.11_1723988_EX-10.11_Affiliate Agreement ...

No items selected | 1 of 1 Pages | Showing 1 - 6 of 6 items

### SteelVaultCorp\_20081224\_10-K\_...

Exhibit 10.16  
**MARKETING AFFILIATE AGREEMENT**  
 This Agreement is made this 1st day of October 2008, (the "Effective Date"), by and between Equidata, Inc., a corporation organized under the laws of Virginia with its principal place of business at 724 Thimble Shoals Boulevard Newport News, Virginia 23606 ("Equidata"), and National Credit Report.com, LLC a Corporation organized under the laws of Florida, with its principal place of business at 7700 N. Congress Ave, Suite 3113, Boca Raton FL33487 ("Marketing Affiliate").

**RECITALS**

- Equidata provides certain personal credit, fraud detection, credit scoring services and credit monitoring for consumers, the ("Services").
- Marketing Affiliate and Equidata wish to enter into an agreement under which Marketing Affiliate may market the Services.
- 

Therefore, if accepted all parties agree that the following shall constitute a marketing agreement between the parties.

**TERMS AND CONDITIONS**

Permission. Subject to the terms and conditions of this Agreement, Marketing Affiliate may display Marketing Materials at its principal place(s) of business, or at the principal

Download

### Item Metadata

SteelVaultCorp\_20081224\_10-K\_EX-1... Expand all

- Dictionaries (3)
- Risks (2)
- Skill Sets (3)**
  - Relevancy: 0.7  1
  - Business Operations (3)**
    - Affiliate Agreement 0.95
    - Online Advertising Agreement 0.75
    - Referral Agreement 0.71
  - Human Resources (1)
  - Information Technology (2)



04

# AI FUNNELING

THE STRATEGIC ADVANTAGE

# DECISION FRAMEWORK

The question isn't 'to AI or not to AI?' It's 'which AI, when, and how?'

## Cognitive AI

- > **When you need:** Automated classification at scale
- > **Possible use case:** GDPR compliance, PII identification, data classification

## Semantic AI

- > **When you need:** Conceptual understanding, not keyword matching
- > **Possible use case:** Finding evidence across languages and euphemisms

## Generative AI

- > **When you need:** Rapid synthesis and summarization
- > **Possible use case:** Executive briefings under tight deadlines

## AI Funneling

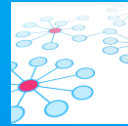
- > **When you need:** All of the above on TB+ datasets
- > **Possible use case:** Complex investigations with large dataset

“ Use the right AI at the right stage. Don't apply expensive GenAI to everything – use Cognitive AI to filter first, Semantic AI to refine, then GenAI for deep analysis of high-value content.”

“ AI Funneling is how you achieve enterprise-scale AI without enterprise-scale costs

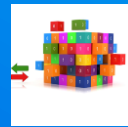
# A PARADIGM SHIFT WITH NUIX NEO >> AUTOMATION + AI

Unlock limitless possibilities with our cutting-edge Automation and Enterprise-Wide Orchestration. Seamlessly create and integrate steps into your preferred workflows across multiple systems. Effortlessly hold, collect, process, post-process, enrich, and review data like never before.



## Data Clustering.

Group similar data points for efficient analysis, identifying patterns and anomalies.



## Classification & Categorization.

Automatically classify and categorize data for faster information retrieval and analysis. Natural Language Processing (NLP) Proprietary Patented Technology >> running on premises without GPU...



## Entity Extraction.

Identify and extract key entities from data sources, providing a comprehensive understanding of the investigation.



## Semantic Searches and more.

Understand the context of data, enabling more accurate and relevant searches beyond simple keywords in documents, images and videos and more to come into our Proprietary Patented Technology Deep Learning Framework >> running on premises without GPU...



## Prompt-Based Research.

Leverage natural language prompts for advanced entity research and investigation on data and images, using your own LLM (on premise) or via a third-party provider (cloud).



## Knowledge Graph.

Construct a knowledge graph to visualize relationships between entities and their connections, uncovering hidden links, based on Entities previously extracted. Apply SNAs.

UNSTRUCTURED,  
SEMI-STRUCTURED,  
STRUCTURED DATA

1,000+ File Types

# NUIX NEO SOLUTIONS

## SOLUTIONS

NEO DATA PRIVACY
AI - Content & Risk Analysis (Data Privacy)
Data Privacy Workflows
Reporting & Analytics
Model Builder

NUIX NEO INVESTIGATIONS
AI - Content & Risk Analysis (Investigations)
Investigation Workflows
Reporting & Analytics
Model Builder

NUIX NEO LEGAL	
LEGAL ECA	NUIX NEO DISCOVER
AI - Content & Risk Analysis (Legal)	Defensible Productions
Legal Workflows	Legal AI (incl. CAL)
Reporting & Analytics	Legal Review Workflows
Model Builder	Model Builder

## PLATFORM CAPABILITIES

IDENTIFY	UNDERSTAND	ANALYSE	ACTION
Find & Collection	Ingest, Process with AI Enrichment, Automation and Orchestration	Review & Analyse	Report, Protect, Delete & Export

Integrated, Automated, No Code UI, and Scalable Architecture.

## DEPLOYMENT OPTIONS (Air-gapped, Neo Local, Neo Cloud, Nuix SaaS)

## PLATFORM OPTIONS PACKS

(HIGH-VALUE ADD-ONS)

Collections	Threat Detection	Elasticsearch	3rd Party Integration	Semantic Search	BYO AI	AI Assistant	Translations Transcriptions
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An aerial photograph of Frankfurt, Germany, at dusk. The Main River flows through the city, with several bridges crossing it. The skyline is illuminated with city lights, and the sky shows a mix of blue and orange from the setting sun. The text is overlaid on the top half of the image.

**SAVE THE DATE**

**17th March 2026**

# **XLR8 FRANKFURT**

**JW MARRIOT FRANKFURT**

# Vielen Dank für Ihre Aufmerksamkeit

Grazie per l'attenzione

Merci de votre attention

Thank you for your attention

# THANK YOU