

**Booz
Allen Ai**

Naval AI Summit

SEPTEMBER 2024

Our AI Advantage at a Glance

Our breadth providing AI services across the federal government allows us to deeply understand your most pressing challenges, creating insight advantages.

#1

provider of AI services to the Federal Government
- Deltek's GovWin 2024

200+

AI Service Contracts

150+

Federal Clients



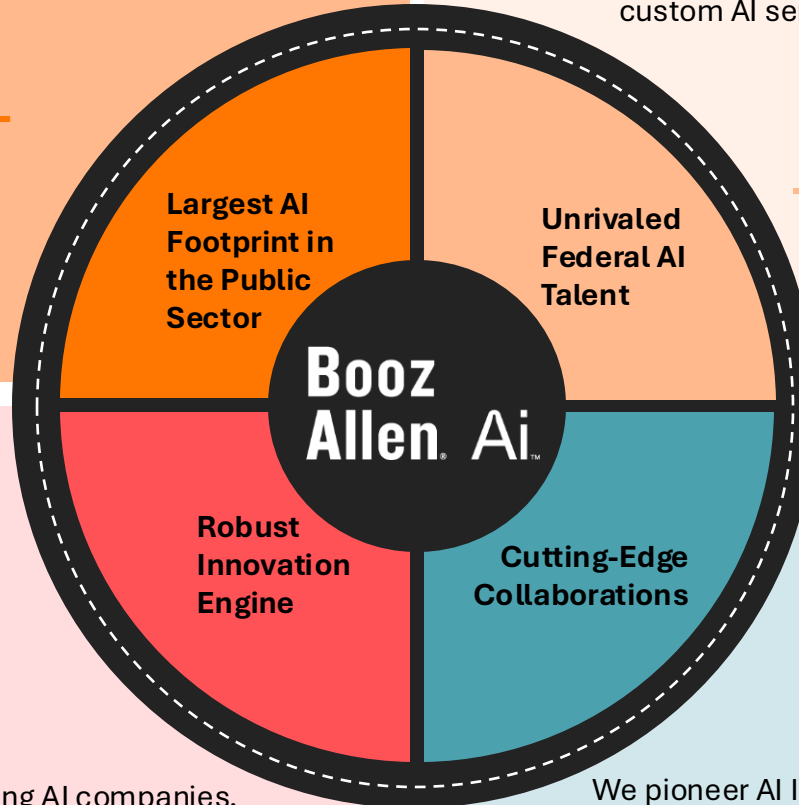
Our AI talent is differentiated by their position at the intersection of mission, commercial technology, and R&D enabling us to provide custom AI services to propel your mission.

2200+ AI Practitioners

100+ Years advising the Federal Government

4 Unique AI Services

1. AI Ready Organization
2. AI Innovation
3. AI Engineering
4. Data for AI



aISSEMBLE™

5 AI Stacks

BOOZ ALLEN'S AI OFFERINGS

4 AI Venture Investments



Mission-Focused R&D

By strategically investing in and partnering with pioneering AI companies, we can quickly integrate customized state-of-the-art capabilities into systems to effectively accomplish federal missions.



\$100M

Venture Capital Fund to accelerate commercial tech deployment for federal clients

We pioneer AI Innovation through R&D, partnerships, and emerging tech investments – propelling government missions today with the AI solutions of tomorrow.

**Booz
Allen Ai**

LabelLogic™

TERRY SCHOOF
ERIC RICE

The Challenge

- Human analysts control information access by assigning security classification markings based on disclosure risk
- In many cases, humans employ an over-classification strategy (assigned higher-than-appropriate marking), which results downstream issues around information access and disclosure
- Each organization typically maintains a **Security Classification Guide (SCG)** which maps contexts to the classification marks, these tend to be lengthy and time-consuming to consult, further encouraging over-classification
- Classification by compilation over multiple sources is by far the most difficult aspect of the tasks coupled with the issues noted above

Current Landscape:

In general, humans are classifying correctly only 4% of the time, given the complexity involved with documentation and research required



- Per policy, both under- and over- classification is discouraged and have comparable impacts the mission

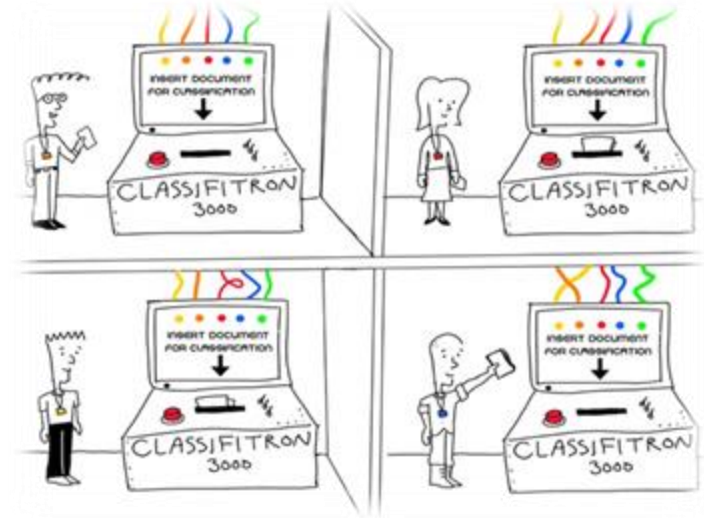
3.1.2 (U) HUMAN RESOURCES MANAGEMENT (HRM)

Item	Level	Directive	Exemptions	Exemptions	Exemptions	DCA	Remarks
(U) The fact that ODNI has an active recruitment, assessment, selection, and evaluation process to hire ODNI staff.	U						
(U) The fact that an <u>overt</u> employee (including their name) works for the ODNI as a staff person, detailee, or contractor.	U						
(U) General information regarding ODNI staff recruitment, assessment, selection, and evaluation process.	U						
(U) Specific information concerning ODNI staff recruitment, assessment, selection, and evaluation of applicants that reveals information which would allow this process to be circumvented.	S	ODNI HRM S-14	NOFORN	1.4(c)	Current date + 25 years		
(U) General information concerning ODNI workforce, mission areas and administrative functions that do not describe the workforce structure in any detail or include names, titles, assignments or locations.	U		FOUO				(U) Does <u>not</u> include: - Specific number of staff, government and contractors in the <u>operational</u> areas (i.e., IARPA, DDH, NIC, NCTC, NCPC, ONCIX, NIEMA, NIM staffs, and the IC CIO), implying priorities and scope, providing insight into sensitive aspects of operational or sensitive missions areas. - Resource totals. (U) When in doubt, contact DNI-Classification for guidance.
(U) Total number of ODNI or IC staff employees authorized or assigned.	S	ODNI HRM S-14	NOFORN	1.4(c)	Current date + 25 years	DNI	(U) Includes organizational charts where resource numbers can be deduced for the <u>operational</u> elements within the ODNI.
(U) Specific information concerning the existing or planned ODNI (or IC) workforce below the Mission Manager-level that describes the workforce structure including names, resource numbers, assignments or locations, which identifies an organization size and capability, or identifies the resources dedicated to an intelligence objective or geographical area.	S	ODNI HRM S-14	NOFORN	1.4(c)	Current date + 25 years	DNI	(U) <u>Classified (notional) example</u> : - ONCIX is comprised of 19 staff and 798 contractors working CI and Security related issues. - NCTC is authorized 500 staff billets, and 400 contractors to execute CT functions on behalf of the USG. - DDH has 122 employees assigned. (U) When in doubt, contact DNI-Classification for guidance.
(U) Resource numbers (staff and/or contractor) covering non-operational ODNI elements, such as P&S, PE.	U		FOUO				(U) FOUO (<u>notional</u>) example: - MSD/HR has 12 staff and 23 contractors.

An excerpt from an SCG released to the public through FOIA request

Our Ai Approach

- Use the Retrieval-Augmented Generation approach to make classification marking suggestions
- The system must provide explanations for its decision as well as cite specific rules and parent classification guides used to make the marking decision
- The system must ultimately run at the highest information level
- Current testing is using **Freedom of Information Act (FOIA)** released classification materials and ChatGPT
- Initial test of capability deployed as a Microsoft Word and Outlook plugins



Principles:

- AI will not be used to make final classification decisions but will augment the decision-making process with relevant rules.
- Our design is intended to build trust in the AI's ability to assist end users in this task, not replace



Derivative Classification

- A derivative classifier is responsible for maintaining the classification level that has been determined by an OCA.
- All NIWC Pacific personnel are considered derivative classifiers for classification levels.
- All NAVWARSSYSCOM personnel are considered derivative classifiers for SCI.
- Contact the Special Security Officer (SSO) for general marking guidance.

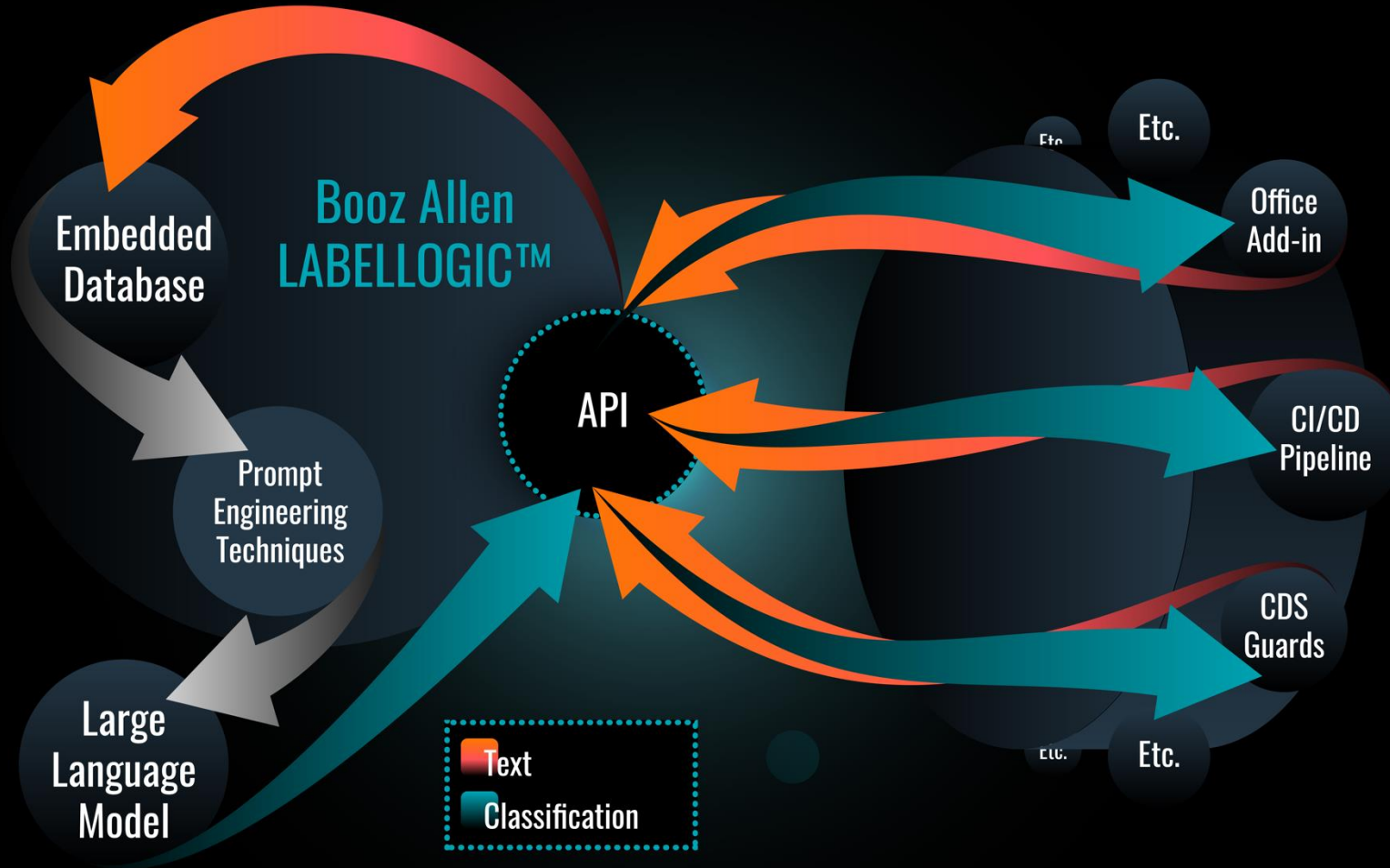
FYI – Done wrong 96% of the time by DOD personnel.

Releasability

- It is challenging to oversee the foreign releasability of disclosure and data at both the unclassified and classified levels
 - Each capability has different and unique releasability, exportability, and disclosure policy rulesets. Not to mention security classification
 - Disclosure guidance currently is often hard-copy and resides in classified spaces.
 - Lack of easily searchable knowledge repository
- Typical questions we are trying to answer:
 - “Fact Of” disclosure is largest inquiry
 - *“Am I able to disclose that Capability-A exists if Country-X is not approved to purchase it?”*
 - *“Am I able to disclose Capability-A on an integration roadmap going to all participant countries?”*
 - Programmatic or Design Details
 - *“Am I allowed to discuss programmatic or design details about Capability-A to Country-X if they are not purchasing Capability-A?”*
- We catered LabelLogic to fit these two use cases, using some anonymized client data. This data includes a representative **Delegation of Disclosure Authority Letter (DDL)** and **Memorandum for Record (MFR)** which revises that DDL



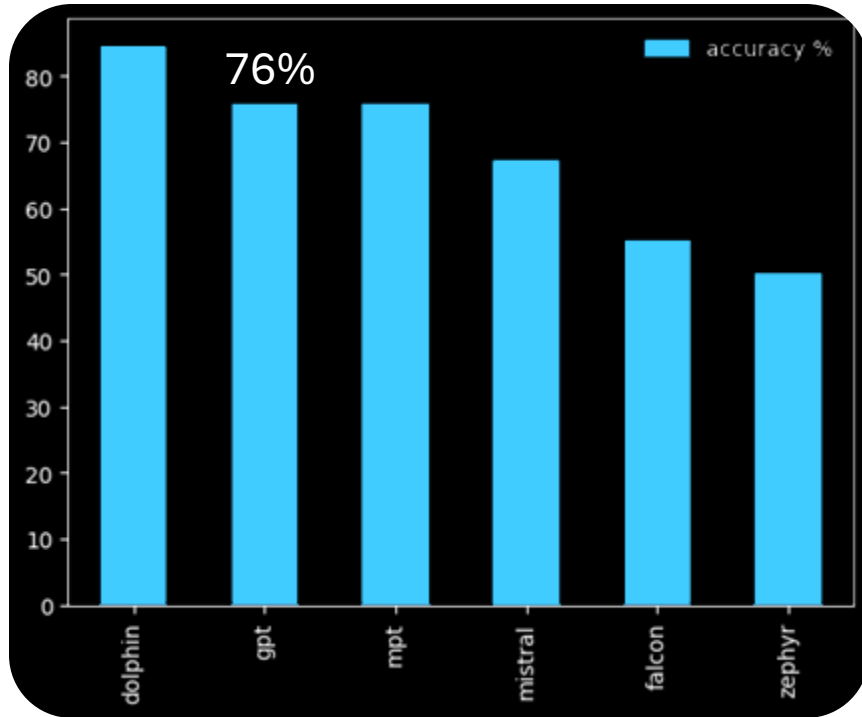
Logic



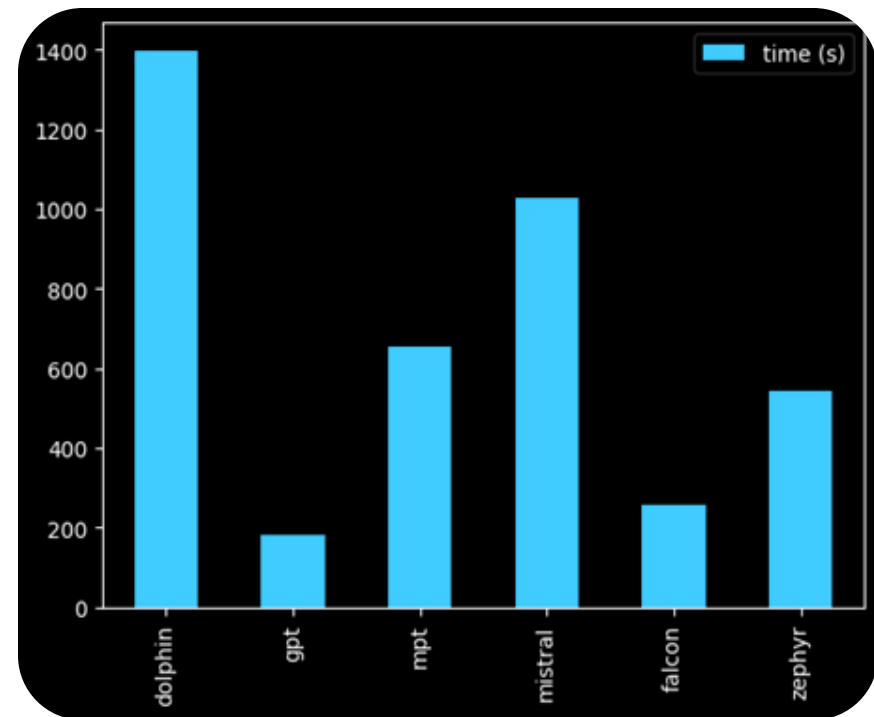
LLM Comparisons

- Accuracy of Classification by LLM

Accuracy



Latency




LabelLogic Demonstration

The screenshot shows a Microsoft Word document titled "MS Word Add-in demo (FOIA and fake, no markings)". The document content is as follows:

**DEPARTMENT OF DEFENSE
DEFENSE PENTAGON, WASHINGTON, DC**

All info herein is released by the Freedom of Information Act (FOIA) or is fabricated for demonstration purposes. All classification markings are for demonstration only.

July 17, 2023



MEMORANDUM FOR USD(P)
SUBJECT: Locations of ODN I Facilities

1. ODN I operates openly in a variety of locations in the D.C. area, including the ODN I headquarters in McLean, Virginia.
2. Routine business activities such as press conferences, interviews for employment, human resource management, legal engagements, and financial record keeping are typically carried out at the McLean location.
3. ODN I maintains a presence in locations outside the Washington D.C. metropolitan area, though these locations are not disclosed to the public.
4. A list of a few of the ODN I locations and their focus areas is as follows:
 - a. ALPHA in Alabama tracks general military plans, weapons systems, and operations.
 - b. BETA in Boston monitors general foreign government information.
 - c. GAMMA in Chicago is concerned with intelligence activities (including special activities), intelligence sources and methods, and cryptology.
 - d. DELTA in Dallas collects information regarding foreign relations or foreign activities of the United States, including confidential sources.

The LabelLogic interface on the right side of the document is titled "ML-ASC Staging" and contains the following elements:

- LabelLogic™ logo
- PLEASE MAKE A SELECTION
- SECURITY CLASSIFICATION button
- RELEASABILITY button
- Help icon (?)
- © 2024 Booz Allen Hamilton Inc. LabelLogic™ v1.5.13

**Booz
Allen Ai**

IGNITIONTM

MARIA BUGGEY

IGNITION™

Organizations across the DoD spend thousands of hours, searching, verifying, and updating information in documents from financial records to technical drawings. This capability suite transforms document management from a liability to an asset via these core services.

Extract



Document AI

- Multi-Format Document Extraction
- Text Restructuring
- Table Detection/Extraction
- Optical Character Recognition
- Image Extraction & Captioning

Retrieve



Semantic AI

- Document/Image Retrieval
- Text Matching
- Document/Text Classification
- Document Organization
- Document Versioning & Duplication Detection

Generate



Generative AI

- Document Q&A
- Information Summarization
- Advanced Natural Language Processing
- Synthetic Data/Document Generation
- Automated Research and Planning

Explain



Explainable AI

- Compliance Review and Quality Assurance
- Decision Assistance
- Knowledge Management
- Information Consistency
- Document Marking/Highlighting

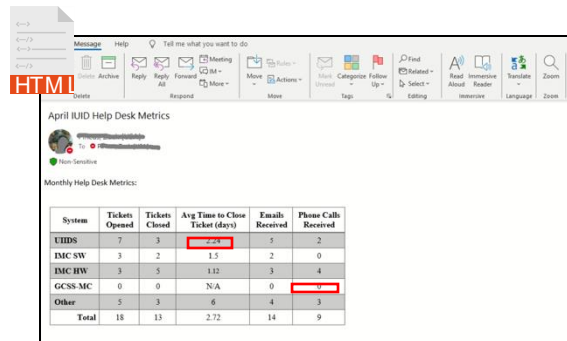
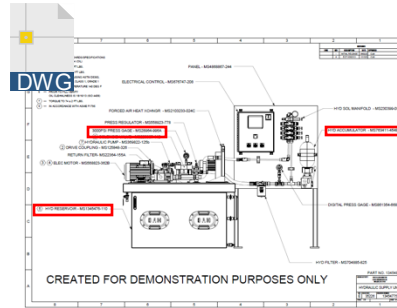
An AI-powered suite of software capabilities that transforms the way teams get work done through flexible automation to increase consistency, efficiency, and quality.

IGNITION™

Use Case – Flexible Data Extraction

Typical Variations for Dates and Times

Date and time patterns	Example
MM/dd/yy	03/22/99
MM-dd-yy	03-22-99
MMM d, yyyy	Mar 22, 1999
EEEE, MMMM d, yyyy	Monday, March 22, 1999
yyyy-MM-ddXXX	1999-03-22+01:00
yyyy/M/d	1999/3/22
MM/dd/yy h:mm a	03/22/99 5:06 AM
MMM d, yyyy h:mm:ss a	Mar 22, 1999 5:06:07 AM
EEEE, MMMM d, yyyy h:mm:ss a z	Monday, March 22, 1999 5:06:07 AM CET
EEE MMM dd HH:mm:ss z yyyy	Mon Mar 22 05:06:07 CET 1999
EEE, d MMM yyyy HH:mm:ss Z	Mon, 22 Mar 1999 05:06:07 +0100
d MMM yyyy HH:mm:ss Z	22 Mar 1999 05:06:07 +0100
MM-dd-yyyy h:mm:ss a	03-22-1999 5:06:07 AM



Extract

Email Extractor

PDF Extractor

Tabular Extractor

HTML/XML Extractor

Pattern Matching

Retrieve

Entity Recognition

Semantic Matching

Fuzzy Matching

Explain

Rule Engine

Welcome to the accelerated decision making demo

This application is a demo of multiple accelerated decision making capabilities

Extract

Q&A

Handwriting

Compliance Review

Upload a PDF file to extract a parts list.

Drop a PDF file here or click to upload (max 20 MB)

Extract

Cancel

Welcome to the Ignition™ demo

This application is a demo of multiple Ignition™ capabilities.

- Extract
- Q&A
- Handwriting
- Compliance Review
- Metrics**

Upload Raw Data Files Here:

Raw Data

Upload Metric Business Rules Here:

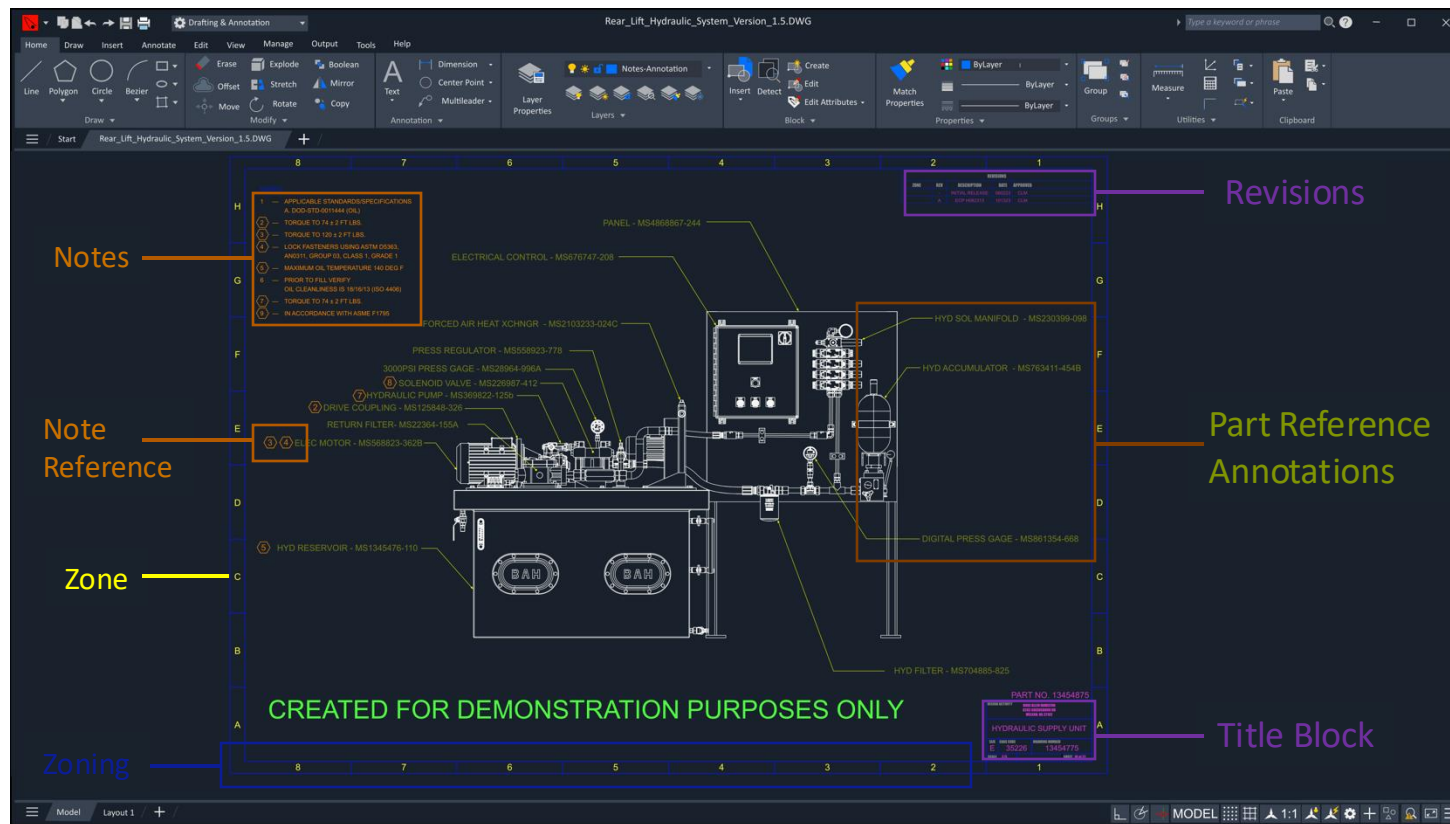
Configuration File

Generate Cancel



IGNITION™

Use Case – Compliance Review



Extract

- DWG Extractor
- Object Detection
- Table Extraction
- Text Parser
- Dependency Mapping

Retrieve

- Cross-Document Alignment
- Database Lookup
- Versioning Detection

Explain

- Document Markup
- DWG Writer
- Rule Engine

Welcome to the Ignition™ demo

This application is a demo of multiple Ignition™ capabilities.

Extract Q&A Handwriting **Compliance Review**

Upload an Engineering Drawing to review.

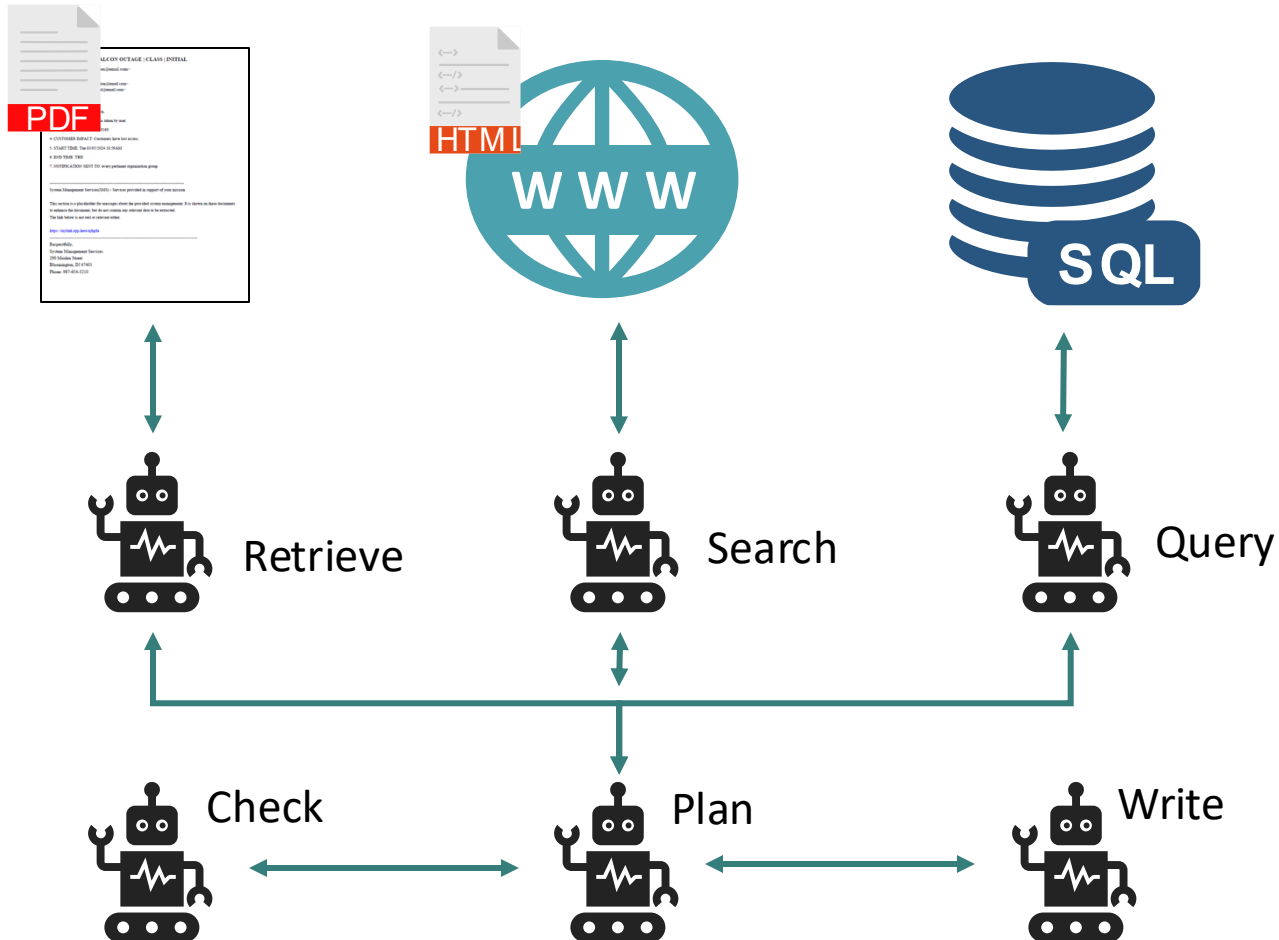
Drop an PDF here or click to upload

- Check Uppercase
- Check Callout Exists For Callout
- Check Flagnote Exists For Callout
- Check Drawing Number
- Check Notes Numbering

Run **Cancel**

IGNITION™

Use Case – Information Gathering



Extract

HTML
Extractor

Text Parser

Table
Extraction

Retrieve

Entity
Recognition

Semantic
Matching

Duplicate
Detection

Cross-
Document
Alignment

Database
Lookup

Versioning
Detection

Generate

AI Agents

Knowledge
Extraction

Prompt
Optimization

Fine-Tuned
Models

Image
Captioning

Generative DB
Query

Welcome to the accelerated decision making demo

This application is a demo of multiple accelerated decision making capabilities.

Extract

Q&A

Handwriting

Compliance Review

Ask a question of your documents' data:

How do we...

Please select your preferred Data Source:

Army Navy Air Force

Submit

Cancel

IGNITION™

Architecture Overview

Extract

Multiformat Extractors

Object Detection

Text Parser

Table Extraction

Pattern Matching

Dependency Mapping

Document Classifier

Document AI

Change Detection

Retrieve

Entity Recognition

Semantic Matching

Multimodal Databases

Data Loaders

Duplicate / Version Detection

Cross-Document Alignment

Multi-Format Embeddings

Generate

Fine-Tuned Models

Prompt Optimization

Knowledge Extraction

AI Agents

Synthetic Data Generation

Generative DB Query

Image Captioning

Explain

Rule Engine

Document Markup

Knowledge Representation

Decision Modeling

Performance Monitoring

Document Writers

**Booz
Allen Ai**

**Naval AI Summit
Thank You!**

SEPTEMBER 2024