

# Responsible Al in Practice

PALANTIR/AIPBOOTCAMP
FOUNDATIONAL SOFTWARE OF TOMORROW.

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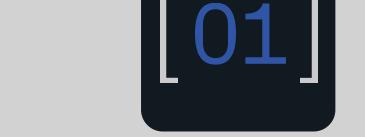
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#### **AGENDA & OBJECTIVES**

- 1/ Introduction to PCL at Palantir
- 2/ Al Ethics & Thought Leadership
- 3/ Privacy & Security by Design
- 4/ Applying Responsible AI to LLMs



# Privacy & Civil Liberties [Engineering]





#### **PCL Team Overview**

#### **HISTORY**

#### **MISSION**

#### **RESPONSIBILITIES**



Provide powerful insights



Protect privacy and civil liberties

"The goal of the Privacy and Civil
Liberties (PCL) team is to design,
build, and deploy privacy-protective
technologies and to foster a culture
of responsibility around their
development and use."



**Product Development** 



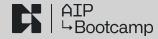
Implementation in the Field



**External Engagement** 



**Internal Culture** 



#### Data Privacy Regulation & PCL Engineering Building Blocks

#### **ACCESS CONTROLS**

Limit access to only what people have a need and right to know.

#### **DATA REVELATION TECHNIQUES**

Show them only the data that they need for their purpose.

#### **RETENTION & PURGING**

Set retention periods and have a deletion strategy.

#### **RAILS & AWARENESS**

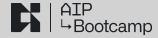
Give them what they need to use solutions as intended – guidance, justification prompts, etc.

#### **AUDIT LOGGING**

Accountability and oversight, guarantees efficacy of all other building blocks.

#### **GOVERNANCE**

Ensure accountability and keeping humans in the loop for Al-assisted workflows.



## Al Ethics & Thought Leadership





# Palantir abides by these Al ethics principles which guide us in asserting our values to all contexts of Al use across our platforms.

#### **Key Principles**

- Focus on the fully integrated system, not just its component tools
- O2/ Acknowledge technology's limits
- Don't solve problems that shouldn't be solved
- <sup>04</sup>/ Adhere to methodological best practices for sound data science
- <sup>05</sup>/ Keep Al responsible, accountable, and oriented toward humans
- OF Promote multi-stakeholder engagement
- <sup>07</sup>/ Ensure technical, governance, and cultural awareness



#### Al Policy Engagements and External Contributions

#### THE WHITE HOUSE



Today, U.S. Secretary of Commerce Gina Raimondo, White House Chief of Staff Jeff Zients, and senior administration officials are convening additional industry leaders at the White House to announce that the Administration has secured a second round of voluntary commitments from eight companies—Adobe, Cohere, IBM, Nvidia, Palantir, Salesforce, Scale AI, and Stability—that will help drive

safe, secure, and trust **Artificial Intelligence** technology.

Appearance in the UK House of Lords

Committee on Al in Weapons Systems

#### Palantir Australia Response to Supporting Responsible Al Discussion Paper

Department of Industry, Science and Resources

July, 2023

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Bill Gates, CEOs of IBM and Palantir to Join Schumer's Al Forum



Aug. 30, 2023, 9:48 PM

Anna Edgerton

A forum on artificial intelligence to be hosted by Senate Majority Leader Chuck Schumer on Sept. 13 will in and civil society leaders, according to a statement from his press office.

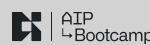
 Attendees include former Microsoft CEO Bill Gates, IBM CEO Arvind Krishna, Hugging Face CEO Clément co-founder Jack Clark and Palantir CEO Alex Karp

SUBCOMMITTEE ON CYBERSECURITY

TO RECEIVE TESTIMONY ON THE STATE OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING **APPLICATIONS TO IMPROVE DEPARTMENT OF DEFENSE OPERATIONS** 



## Privacy & Security by Design





Palantir maintains
rigorous, externally
verified infrastructure
and operations
standards.

Foundry is **externally certified** for the following baselines:

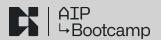
- 1. SOC 2 Type II
- 2. ISO 27001, ISO 27017 and 27018
- 3. FedRAMP Moderate (Foundry for US Government)
- 4. US DoD Impact Level 5 (Foundry for US DoD)

On top of those certifications, we are **aligned** with the controls and policies of:

- 1. NIST 800-53 and 800-171
- 2. ISO 27002, 27003
- 3. ISO Business Continuity and Risk Management Standards

In addition, Palantir has extensive experience helping customers meet specific regulatory and industry requirements, including:

- 1. EU General Data Protection Regulation (GDPR)
- 2. US Health Insurance Portability and Accountability Act (HIPAA)
- 3. California Consumer Privacy Act (CCPA)
- 4. Federal Information Security Modernization Act (FISMA)

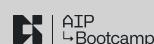


## All AIP infrastructure is *private* and *secure* by design.

- Palantir has out-of-the-box open-source models ready to be leveraged by the customer.
- Customer administrators toggle which models they want configured and available to users.
- Customer models can be securely integrated to AIP.
- Palantir-provided models are ephemeral and geo-restriction is configurable, where available.
- Customer data is not used to retrain Palantir-provided models.
- Communication with models is through encrypted TLS 1.2+ HTTPS, and AIP enforced strict Ingress/Egress rules.



# Applying Responsible Al to LLMs



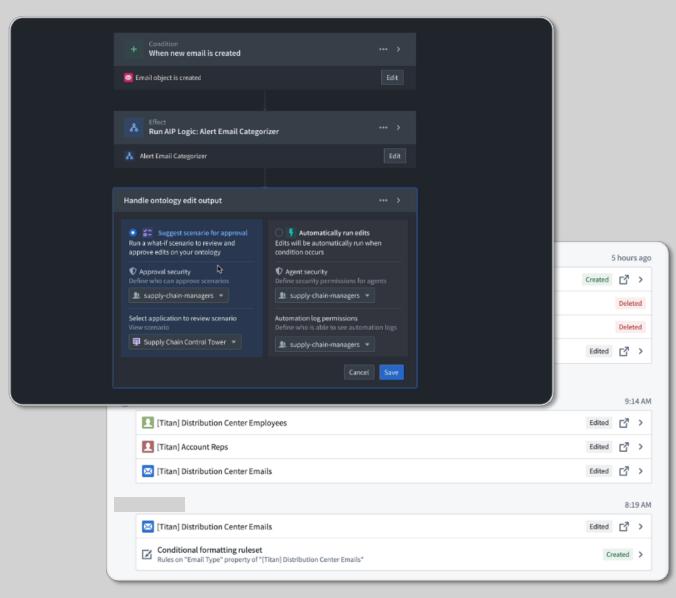


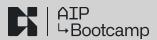
# Designing Human-centered workflows

5. Keep AI responsible, accountable, and oriented toward humans



- Delegate to humans what they're good at, delegate to machines what they're good at
- Have strong security & audit capabilities for added transparency & interpretability
- Limit reasoning and implicit tool chaining
- Link back to the sources and present immutable tool outputs to enable verification
- Reinforcement learning through human feedback and related techniques





### Robust data governance underpins responsible Al systems

1. Focus on the fully integrated system



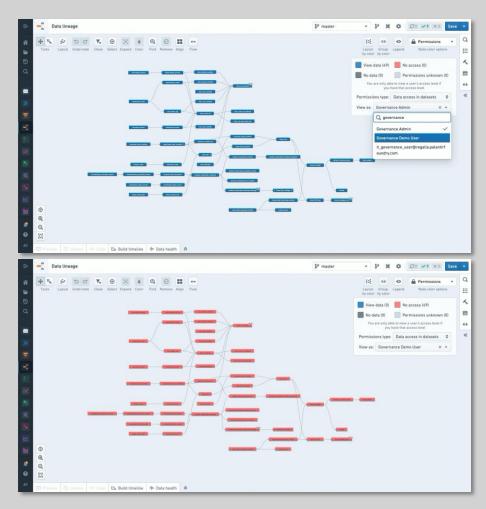
## Track Permissions and Data Access for Humans and LLMs

#### **OVERVIEW**

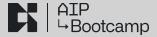
As you start ingesting data, and permissions get set on the incoming data as well as any applications downstream, platform administrators and compliance users will want to review permissions.

#### **IMPLEMENTATION**

Regularly validating permissions on already ingested data or reviewing permissions as new data helps prevent possible misconfigurations and inadvertent exposure of sensitive data downstream.



Access for User with and without Permissions



#### Al Testing & Evaluation Best Practices

#### **Model Management & Evals**

#### Reduction to supervised learning:

- → seed data generation and labeling processes
- training and sustaining supervised models

#### Prompts as model hyper – parameters:

- → empirical evaluation of prompting strategies
- → analyzing variations in prompt structure, wording, length, tone
- → dynamically generated prompts

#### **Workflow Design**

#### Decompose tasks/decisions:

- → structural evaluation
- → content evaluation
- → semantic evaluation
- → Metrics → workflow KPIs
- → State space guardrails
- → Human evaluation and red teaming to probe system limitations
- → Adversarial evaluation
- → LLMs to evaluate LLMs

#### **Operational Testing**

- → Human Review
- → Safety/Unit Tests
- Incremental Release and monitoring
- → A/B Testing
- → Shadow Testing
- → Scenarios- and simulation-based testing



### **Q** Palantir





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