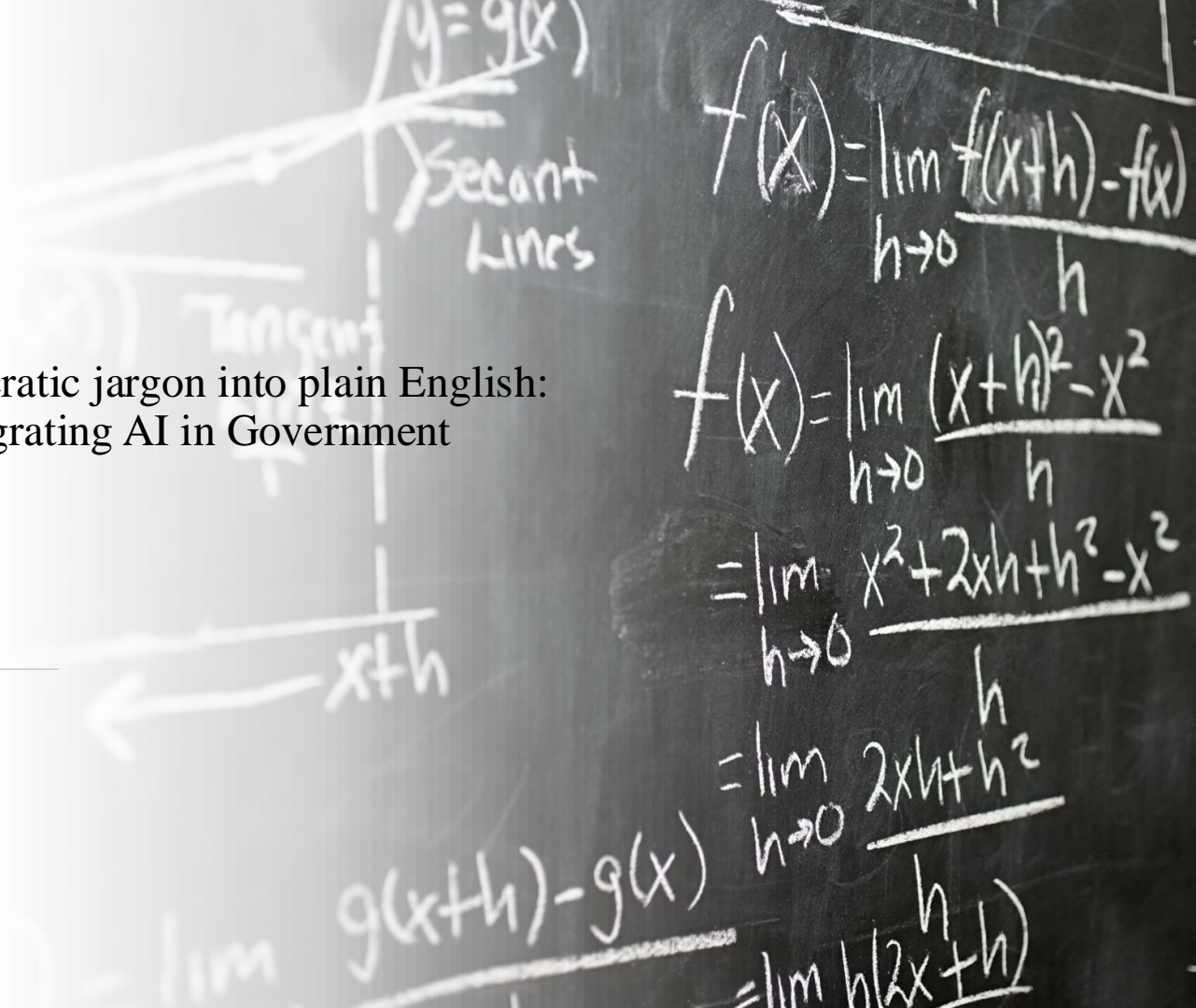


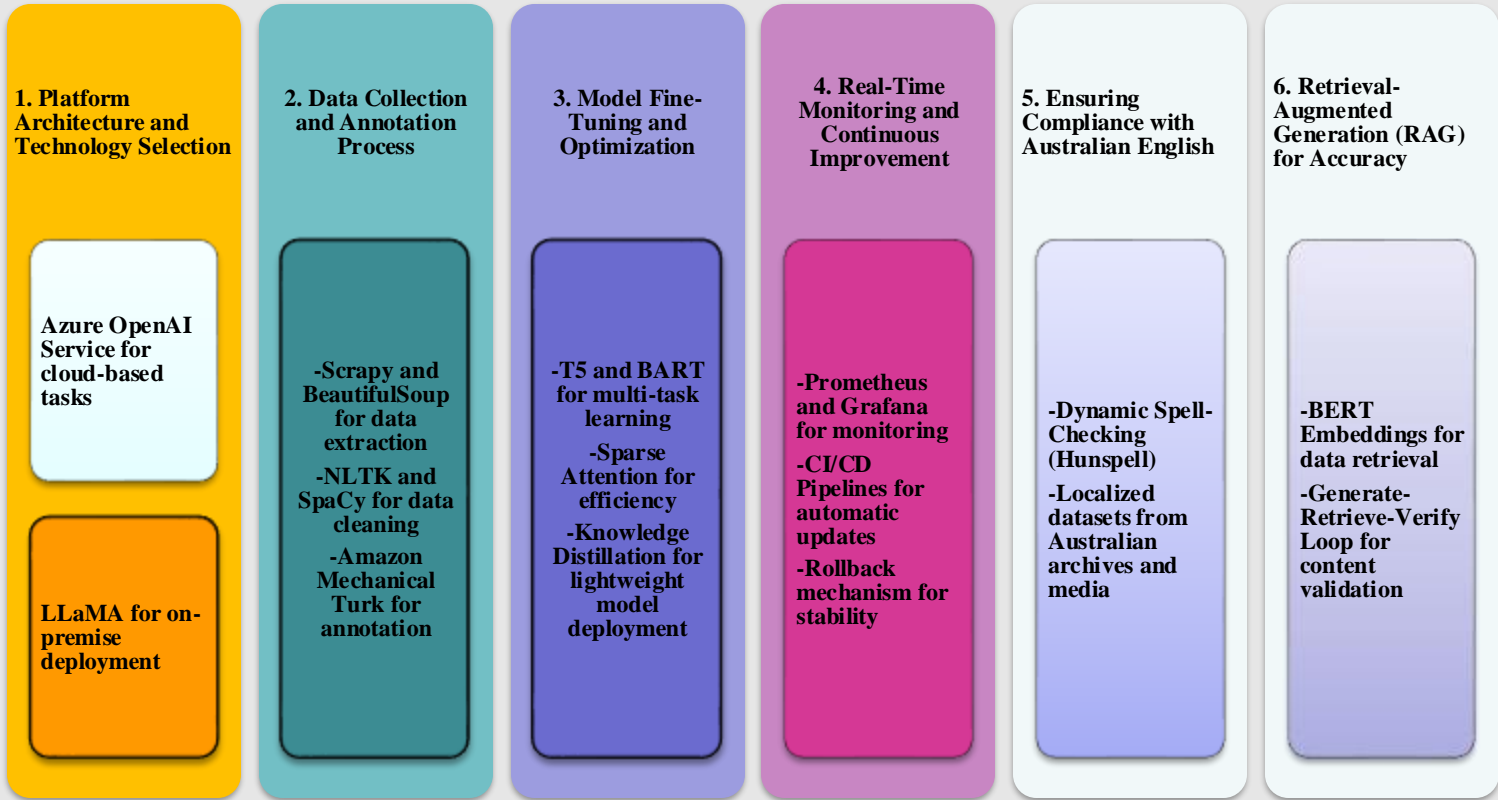
Use AI to transform bureaucratic jargon into plain English:
A Holistic Approach to Integrating AI in Government
Document Workflows

Guan, Yongzhen & Josiah Watson

07/09/2024



• *A Holistic Approach to Integrating AI in Government Document Workflows*



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1. Platform Architecture and Technology Selection

Azure OpenAI Service for cloud-based tasks

LLaMA for on-premise deployment



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2. Data Collection and Annotation Process

Scrapy and BeautifulSoup for data extraction

NLTK and SpaCy for data cleaning

Amazon Mechanical Turk for annotation



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3. Model Fine-Tuning and Optimization

T5 and BART for multi-task learning

Sparse Attention for efficiency

Knowledge Distillation for lightweight model deployment



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4. Real-Time Monitoring and Continuous Improvement

Prometheus and Grafana for monitoring

CI/CD Pipelines for automatic updates

Rollback mechanism for stability



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5. Ensuring Compliance with Australian English

Dynamic Spell-Checking (Hunspell)

**Localized datasets from Australian
archives and media**



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6. Retrieval-Augmented Generation (RAG) for Accuracy

BERT Embeddings for data retrieval

Generate-Retrieve-Verify Loop for content validation



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