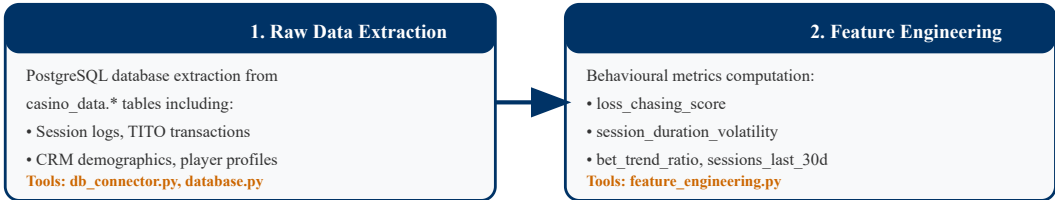


# Casino AI Pipeline Framework

ML-Powered Customer Segmentation & Promotional Targeting  
University of Bath | MSc Computer Science | Ethical Approval: 10351-12382

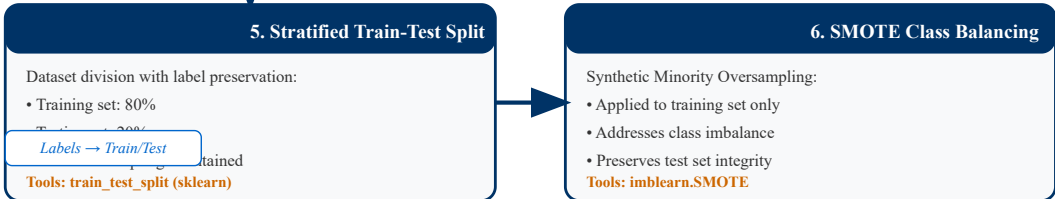
## Phase 1: Data Preparation



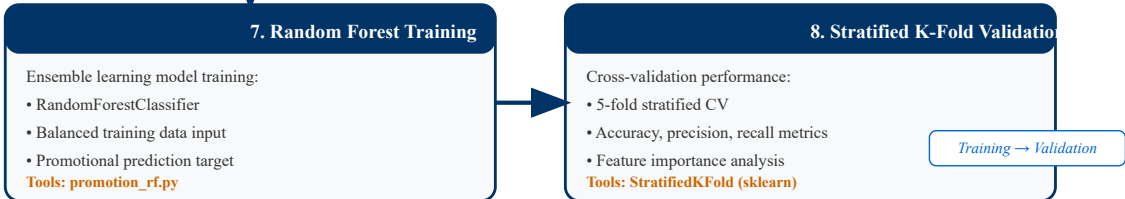
## Phase 2: Customer Segmentation



## Phase 3: Data Preparation for ML



## Phase 4: Machine Learning & Training



## Phase 5: Model Deployment



GDPR Article 26 Compliant | Anonymised Data Processing | No Commercial Deployment  
Original Academic Work | M.Y. Canli (2025) | University of Bath | Reproducible Research Framework  
Ethical Research Standards Applied | No External AI Content Generation | Pure Academic Implementation

## Data Flow Summary

Raw Casino Data → Feature Engineering → Customer Segmentation → Label Generation →  
Train-Test Split → SMOTE Balancing → Random Forest Training → Cross-Validation → Production Deployment  
End-to-End ML Pipeline for Casino Customer Engagement Optimization

