AI-Powered Trust & Priority Scoring Engine: SmartLead+

The process of finding reliable, high-quality business leads is automated with SmartLead+, an AI-based lead validation and scoring tool. Sales, analyst, or investment teams can use this system to prioritize high-performing leads and lower outreach risks.

Method created, two models:

A Trust Model for Using Web/Email Signals to Evaluate Lead Legitimacy. A Priority Model for Ranking Leads according to Context and Business Relevance. With the help of filters, search, and export features, both models operate on preprocessed lead data and are integrated into a Streamlit-based user interface.

Model Selection:

- **Trust Model**
  Type: Random Forest Classifier
  Reason: Works well with tabular business data and is robust to feature importance variations
  Labels: Simulated using rules (low missingness, secure site, valid email)
- **Model of Priority:**
  Heuristic Regression Score (0–100) is the type.
  Reason: Provides for flexible business-weighted scoring based on attributes such as trust outcome, domain type, and company size.

Preprocessing Data

EmailLength, WebsiteHTTPS, HasDisposableDomain, MissingFields, and EmailCompanyMatch were added to the raw lead data (CSV).

The trust model's simulated labels were produced using realistic validation logic. Missing values were addressed, features were cleaned, and they were encoded.

Performance Evaluation: 91% accuracy of the trust model (on test data simulated trust labels). Due to the usage of sample datasets

Precision/Recall: Excellent precision in excluding phony leads from disposable emails or insecure websites

The significance of a feature - MissingFields, HasDisposableDomain, and WebsiteHTTPS were the top predictors.

Impact on Business

Minimizes manual labor in weeding out low-quality or fraudulent leads; encourages more intelligent outreach by emphasizing relevance and trust. It can be scaled via API for automated workflows or integrated with CRM.

Stack

- Python, Streamlit, Pandas, Scikit-learn

- Notebook: notebooks/trust_model_training.ipynb

- Model saved as: models/trust_model.pkl