

# IRP 13: Individual Research Project

## Topic

Predicting financial trends using text mining and NLP

## Objectives

Improve the use of AI-based natural language processing (NLP) solutions in order to predict credit risk and fiscal fraudulent behaviour based on speech text from audit reports, social media, and other sources. Predicting non-compliance based on free-text responses from survey respondents' perceptions. Constructing attitudinal indices based on free text and incorporating them into behavioural models in order to predict the likelihood of system fraud or the level of risk associated with accreditation.

## Involvement

- IRP belongs to WP1 (Financial Data Space)
- WP Leader: BBU (Cluj)
- Two supervisors from secondments: RAI, and ECB

## Deliverables

Constructing large databases that provide both qualitative and quantitative data for use in the development of AI algorithms for both public and private. Using text mining and NLP, evaluate the viability of various models that could predict the risk of fraudulent behaviour in the financial sector. Utilisation of these models in both the public sector (public policy formulation) and the private sector (help banks and FinTechs in credit scoring).

