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Neural Text Classification for Digital Transformation in the Financial Regulatory Domain

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ANDINUM

Enabling Digital Transformation

Artificial Intelligence, Natural Language Processing, and Machine Learning

- Document Understanding
- Digital Transformation
- Compliance

Who we are

Nelson Correa, Ph.D.

- ▶ Electrical engineer / Ingeniero Electrónico
- ▶ Computational linguist, software developer
- ▶ AI/ML/NLP, Entrepreneur
- ▶ ex-IBM, ex-Universidad de los Andes

Antonio Correa, MBA

- ▶ MBA UniAndes / Ingeniero Electrónico
- ▶ Business development 5G Mobile networks
- ▶ 25 years in the Telecom sector: ex-Radiar, Nortel, Alcatel/Lucent, Oracle, Mavenir

AGENDA

Artificial intelligence, Machine learning, NLP and finance applications

- ▶ Introduction: AI/ML/NLP and digital business transformation
- ▶ Natural language processing and deep learning
- ▶ Financial NLP: CFPB consumer financial complaints
- ▶ Text classification: Baselines and Large Language Models (LLMs)
 - ▶ CFPB baselines: Bayes, Perceptron and LSTM classification
 - ▶ CFPB LLMs: Transformer models (DistilBERT, FinBERT)
- ▶ Model evaluation and responsible AI
- ▶ Conclusion & questions