



Explainable AI in Lending

Encode Club - AI Hackathon

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Structure

- **Motivation:** Why does explainability matter? (5 mins)
 - Consumer
 - Regulation
 - Lender
- **Deep Dive:** Credit risk model building (20 mins)
- Q & A (5 mins)

A true story about applying for a credit card



Incoming new AI regulation in the UK and EU

Policy paper

A pro-innovation approach to AI regulation

Updated 5 August 2023

"**Explainability** refers to the extent to which it is possible for relevant parties to **access, interpret and understand the decision-making processes** of an AI system"

"An AI tool assessing the **credit-worthiness** of loan applicants is trained on **incomplete or biased** data, leading the company to offer loans to individuals on **different terms** based on characteristics like **race or gender**"

EU AI Act: first regulation on artificial intelligence

"AI systems used to **evaluate the credit score or creditworthiness** of natural persons should be classified as **high-risk AI systems since** they determine those persons' access to financial resources or essential services such as **housing, electricity, and telecommunication services**"

"AI systems used for this purpose may lead to **discrimination of persons or groups** and perpetuate historical patterns of discrimination, for example, based on **racial or ethnic origins, gender, disabilities, age, sexual orientation**, or create new forms of discriminatory impacts.."

Lenders benefit from explainability



**Understanding
Risk Factors**



Transparency



**Model Risk
Management**



Mitigate Bias



Customer Communication

CREDIT RISK MODEL BUILDING!

