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Gaussian Process Regression for Loan Recommendations

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Abstract

Hello

1 Introduction

Hello

2 Motivating Application

Hello

3 Technical Approach

Gaussian process:

$$\mu(\mathbf{x}) = E[f(\mathbf{x})]$$
$$k(\mathbf{x}, \mathbf{x}') = E[(f(\mathbf{x}) - \mu(\mathbf{x}))(f(\mathbf{x}') - \mu(\mathbf{x}')]$$

The GP can then be denoted as:

$$f(\mathbf{x}) \sim \mathcal{GP}(\mu(\mathbf{x}), k(\mathbf{x}, \mathbf{x}'))$$

Problem Definition

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1. Hello
2. Hello

Model Definition

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4 Experimental Setup

Dataset

Hello

5 Experimental Evaluation

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Type	Features	Kernel	MAE	R^2
Per-Movie	Numeric	RBF	0.7823	**0.2308**
		Cosine	0.7823	**0.2308**
		Linear	0.7823	0.2307
Per-User	Numeric	RBF	**0.8127**	**0.1663**
	OneHotEncoding		0.8273	0.1424
	Word2vec Genres		0.8210	0.1544
	Word2vec Movies		0.8278	0.1424
	Probabilistic		0.8204	0.1534

6 References

7 Roles and Contributions

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