Évaluation des apports d'un GAN pour une classification semi-supervisé de textes français faiblement labellisés

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Résumé Les tâches de classifications de textes se heurtent souvent au problèmes de base de données peu voir pas labellisé. Ici nous nous intéressons au apports de l'ajout d'un GAN afin d'artificiellement créer des données labellisés. Le but est d'améliorer les performances d'un classifieur qui ne se serait entraîné que sur des données labellisé issue d'une petite base de données.

Keywords: réseau de neurones, réseaux antagonistes génératifs, traitement du language, classification, semi-supervisé

1 Introduction

Ce travail à été réalisé dans le cadre d'un TER (Travail d'Étude et de Recherche) par Dylan Baptiste, étudiant en 2^e année de Master, supervisé par Shufan Jiang, doctorante, et Stéphane Cormier, enseignant-chercheur, à l'Université de Reims Champagne-Ardenne.

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4 Apports d'un GAN dans une classification semi-supervisé

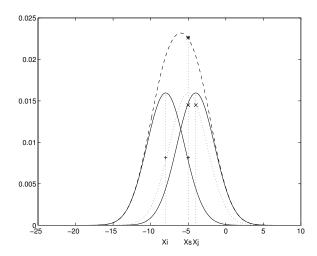


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$$\psi(u) = \int_{0}^{T} \left[\frac{1}{2} \left(\Lambda_{o}^{-1} u, u \right) + N^{*}(-u) \right] dt . \tag{1}$$

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Example of a Computer Program

```
program Inflation (Output)
  {Assuming annual inflation rates of 7%, 8%, and 10%,...
  years);
   const
     MaxYears = 10;
   var
     Year: 0..MaxYears;
    Factor1, Factor2, Factor3: Real;
   begin
     Year := 0;
     Factor1 := 1.0; Factor2 := 1.0; Factor3 := 1.0;
     WriteLn('Year 7% 8% 10%'); WriteLn;
     repeat
       Year := Year + 1;
       Factor1 := Factor1 * 1.07;
       Factor2 := Factor2 * 1.08;
       Factor3 := Factor3 * 1.10;
       WriteLn(Year:5,Factor1:7:3,Factor2:7:3,Factor3:7:3)
     until Year = MaxYears
end.
```

(Example from Jensen K., Wirth N. (1991) Pascal user manual and report. Springer, New York)

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