



Master 1 Informatique
Parcours SRS

Final report

Epilepsy seizure detection using multisensors

Abla Errahmane, Tanguy Le Bretton
Supervisors : M.Gheryani, O.Salem

May 2019

Summary

1	Introduction	4
1.1	Context	4
1.2	About the situation	4

1 Introduction

1.1 Context

Our project...

1.2 About the situation

Let X_1, \dots, X_n independent and identically distributed random variables with a mean μ and a standard deviation σ . We denote $\bar{X}_n = n^{-1} \sum_{i=1}^n X_i$. Then the law of $\frac{\bar{X}_n - \mu}{\sigma/\sqrt{n}}$ tends to the reduced central normal law. This is also written : for all a and b real numbers,

where Z is a reduced centered Gaussian variable, $Z \sim \mathcal{N}(0, 1)$

Algorithm 1: quantization

Result: *quantized* : the data quantized

Data: *data* : One feature of an activity (a matrix), *TS* : a threshold

quantized \leftarrow [];

foreach $data_{i,j}$ *in* *data* **do**

if $data_{i,j} \geq TS$ *or* $data_{i,j} \leq -TS$ **then**

 | *quantized* $_{i,j} = 1$;

end

else

 | *quantized* $_{i,j} = 0$;

end

end
