模式识别上机实验一

何长鸿 2016141482154

## 代码

1. Uniform.m

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| --- |
| function [ ret ] = Uniform( x1,x2 )  ret = int16(rand\*(x2-x1)+x1);  end |

1. GetSamples.m

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| --- |
| function [ sample ] = getSamples( n )  sampleNum = n;  count=0;  sample=zeros(sampleNum,1);  cur = 1;  while count<sampleNum  xt1 = Uniform(-100,100);  xt2 = Uniform(-100,100);  n = Uniform(0,1000);  x1 = min([xt1, xt2]);  xu = max([xt1, xt2]);  for i=1:n  sample(cur)=Uniform(x1,xu);  cur = cur+1;  if cur>sampleNum  break  end  end  if cur>sampleNum  break  end  end  end |

1. Run.m

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| --- |
| clc; clear;  n = 1e4;  sample = getSamples(n);  f = subplot(2,2,1);  f.XLabel.String='1e4';  hist(sample,n);  clear sample;  n = 1e5;  sample = getSamples(n);  f = subplot(2,2,2);  f.XLabel.String='1e5';  hist(sample,n)  clear sample;  n = 1e6;  sample = getSamples(n);  f = subplot(2,2,3);  f.XLabel.String='1e6';  hist(sample,n)  clear sample;  n = 5e6;  sample = getSamples(n);  f = subplot(2,2,4);  f.XLabel.String='5e6';  hist(sample,n)  clear sample; |

## 结果图

