

# Matching a set of random numbers to a sum of normal distributions.

---

*Source:* <http://sci.tech-archive.net/Archive/sci.math/2005-05/msg00823.html>

---

- *From:* TLOlczyk <[olczyk2002@xxxxxxxxxx](mailto:olczyk2002@xxxxxxxxxx)>
  - *Date:* Thu, 05 May 2005 05:13:59 GMT
- 

Hi.

I have a problem where I will be generating a set of random numbers based on a distribution:

$$D(x) = A N(a_0, d_0)(x) + \sum_{i=1}^M (B_i N(a_i, d_i)(x))$$

where  $N(a, b)(x) = e^{-(x-a)^2/b^2}$  ( a normal distribution)

However I do not know what  $A, B_i, M, a_i, d_i$  are.

I would like an algorithm to find these values so that  $M$  and  $d_i$  are minimised.

Can anyone make suggestions?

The reply-to email address is [olczyk2002@xxxxxxxxxx](mailto:olczyk2002@xxxxxxxxxx)

This is an address I ignore.

To reply via email, remove 2002 and change yahoo to interaccess,

\*\*

Thaddeus L. Olczyk, PhD

There is a difference between

\*thinking\* you know something,

and \*knowing\* you know something.

.

- 
- Prev by Date: [\*\*\*Re: The logical structure of calculus, request for help.\*\*\*](#)
  - Next by Date: [\*\*\*Re: Inverse Laplace transform with not completely defined functions\*\*\*](#)
  - Previous by thread: [\*\*\*Re: Experimentation starts\*\*\*](#)
  - Next by thread: [\*\*\*roulette winning system question\*\*\*](#)
  - Index(es):
    - ◆ [\*\*\*Date\*\*\*](#)
    - ◆ [\*\*\*Thread\*\*\*](#)