

## Re: complexity of numerical software(2)

---

*Source:* <http://sci.tech-archive.net/Archive/sci.math.symbolic/2005-12/msg00150.html>

---

- *From:* Jaap Spies <j.spies@xxxxxxxx>
  - *Date:* Fri, 09 Dec 2005 22:00:16 +0100
- 

Nasser Abbasi wrote:

"Jaap Spies" <j.spies@xxxxxxxx> wrote in message  
[news:dncml0\\$eu2\\$1@xx](mailto:news:dncml0$eu2$1@xx)

Richard Fateman wrote:

Jaap Spies wrote:

???I don't know where this enumeration problem came up,  
but in my view it is not "numerical software" in the  
sense of "numerical analysis". Combinatory enumeration  
has its interesting aspects, but to say, based on this  
example, that numerical software is easy (or hard) doesn't  
seem convincing.  
RJf

Do something to proces alle n-subsets of a m-set.

```
> problem(int n, int m)
> {
>     int i, j;
```

Re: complexity of numerical software(2)

RJF

May be I stretched the meaning of numerical software a little to far. At best it is seminumerical, but I did not have an example of well documented code at hand to make my point with true numerical software.

I think the difficulty in numerical/scientific software is not in the coding part itself, it is in having the knowledge to understand the problem itself that you are solving and coding a solution for.

These are a couple of positions at JPL, they require coding in what I would consider scientific software, numerical area.

----- "Required Skills: Ph. D. in physics or space physics with 1-6 years of experience, Masters with 3-8 years of experience or Bachelor's with 5-10 years of experience or equivalent.

...  
of computer equipment. Demonstrated experience in FORTRAN programming. "

-----

"Required Skills: Ph.D in Analytical Chemistry with 1+ years of experience, or MA/MS degree with 3+ years experience, .....Experience using MATLAB, PLS tool box, GRAMS"

-----

I do not think I ever seen a job posting asking for a PhD as a qualification to write a web page or an SQL application or even a device driver.

Nasser

## Re: complexity of numerical software(2)

I could not agree more. That is why I underlined the meaning of a good education.

For writing a device driver you maybe need more engineering capabilities?

Jaap

.