Subject: Re: Job Offer: Dept. of Planetary Sciences, Univ. of Arizona Posted by Ken Knighton on Fri, 26 Jan 1996 08:00:00 GMT

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"George D. Palo" <geop@whidbey.com> wrote:

> Tim Patterson wrote:

>>

- >> The Department of Planetary Sciences at the University of Arizona in
- >> Tucson is seeking a highly-motivated and self-directed individual to
- >> fill the position of **Application Systems Analyst, Senior**.

>>

- >> CASPER is a software package written in Fortran and C for this
- >> purpose,
- > Fortran still exists ... amazing.

Fortran is still very widely used in the scientific community. Most of the major numerical analysis codes are written in Fortran and there are literally billions of lines of Fortran code in use today. At a cost of \$3-\$5 per line of code, this represents a pretty significant replacement cost. I am not a big fan of Fortran (or Cobol, which has a far larger body of code in place), but there will probably be a Fortran 2020 standard (ratified in 2026 no doubt).

```
>> >> Annual salary will be in the range $ 32,500 - $ 36,500. > > You've got to be kidding! Try $72,000 to $96,000.
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You must work in the bay area. The figure you give is no doubt greater than the salaries made by the Ph.D. researchers in that department. These researchers are used to paying \$12,000/year to highly capable grad students to do the same thing. Also, most researchers have written 500-1000 line tangled webs of code that they believe are computer programs, and so they view programming as something that is inherently easy, requires merely above average intelligence, and is mostly just grunt work like writing a paper or preparing a presentation. Realizing that the researchers control the funds and that they are underpaid for the amount of education and hard work that they have invested, it is easy to understand that they would resent paying market wages to someone doing a task that they perceive as easy.

Finally, in Tucson, I would expect a computer programmer with this amount of experience to make \$45,000-60,000/yr plus good benefits. In reality, there will probably be a lot of competition from the many Ph.D. scientists who can't find a job in their field. This means that:

> The data from the

> Cassini Mission will be dependent upon some one making ...

entry level BS Comp. Sci. graduate wages.

Regards,

Ken Knighton General Atomics San Diego, CA knighton@gav.gat.com knighton@cts.com

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Subject: Re: Job Offer: Dept. of Planetary Sciences, Univ. of Arizona Posted by bcohen on Fri, 26 Jan 1996 08:00:00 GMT View Forum Message <> Reply to Message

George D. Palo (geop@whidbey.com) wrote:

- : Tim Patterson wrote:
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- : Cassini Mission will be dependent upon some one making clerks wages.
- : George

Well, then, write your congresspeople and advise them to increase the budgets for programs like NASA and NSF. If projects like Cassini had more

money set aside for personnel, then people could get paid a going market value.

As it is, the NSF budget is in EXTREME danger because nobody is standing up for NSF in congress. If you'd like to see pure science continue in this country, now is the time to voice your opinions!!

Barbara Cohen Cosmochemical Cocktail Mixer, PhD to be

Johnny was a chemist, a chemist he is no more For what he thought was H2O was H2SO4.

Subject: Re: Job Offer: Dept. of Planetary Sciences, Univ. of Arizona Posted by George D. Palo on Fri, 26 Jan 1996 08:00:00 GMT View Forum Message <> Reply to Message

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George

Subject: Re: Job Offer: Dept. of Planetary Sciences, Univ. of Arizona Posted by joseph.b.gurman on Sun, 28 Jan 1996 08:00:00 GMT View Forum Message <> Reply to Message

In article <4ebdsn\$p5g@news.ccit.arizona.edu>, bcohen@lpl.arizona.edu (Barbara A Cohen) wrote:

- > George D. Palo (geop@whidbey.com) wrote:
- >: Tim Patterson wrote:
- >:>

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>: > Tucson is seeking a highly-motivated and self-directed individual to
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> Well, then, write your congresspeople and advise them to increase the
> budgets for programs like NASA and NSF. If projects like Cassini had more
> money set aside for personnel, then people could get paid a going market value.
> As it is, the NSF budget is in EXTREME danger because nobody is standing up
> for NSF in congress. If you'd like to see pure science continue in this
> country, now is the time to voice your opinions!!
```

At the risk of making this sound like alt.science.salaries, perhaps even our Congresspeople know that people go into science for the love of the subject, not because they think they can make market value wages doing it.

Believe it or not (I know, not), there are a few scientists out there who _can_ write professional quality code, and many of them end up doing so for a living, precisely because they're cheaper than professional programmers. When we do get skilled programmers working on the scientific analysis of data, the taxpayers spent \$M to \$B on, they tend to be (i) young, (ii) idealistic.

and (iii) convinced the space program is a neat place to work. As the scales fall from their eyes, they get older, much more cynical, and often have to help support families --- all the while living in the rather expensive places much of space science is done (the Bay area and the DC area, for two examples). Even when they still think the space program is a neat thing, they become too pricey to be anything but a manager of others who write code. As fine an example of the Peter Principal as one could imagine.

And if you want to retain a sys admin/network manager who could get a job with an ISP any day for twice the salary she gets now, what can you offer her?

It all comes down to underpaid recent graduates and unpaid overtime (lots of

it). Faster, cheaper, better?

Joe Gurman

| Joseph B. Gurman / NASA Goddard Space Flight Center / Solar Data Analysis | Center / Code 682.3 / (301) 286-4767 / joseph.b.gurman@gsfc.nasa.gov | (This .sig line declared non-emergency.) | | "Excepted" = employed but unpaid. Wonder if my kids can eat that?

Subject: Re: Job Offer: Dept. of Planetary Sciences, Univ. of Arizona Posted by Irn on Wed, 31 Jan 1996 08:00:00 GMT

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Ken Knighton (knighton@gav.gat.com) wrote:

: You must work in the bay area. The figure you give is no doubt greater

: than the salaries made by the Ph.D. researchers in that department.

: These researchers are used to paying \$12,000/year to highly capable grad

: students to do the same thing. Also, most researchers have written

: 500-1000 line tangled webs of code that they believe are computer

: programs, and so they view programming as something that is inherently

: easy, requires merely above average intelligence, and is mostly just

: grunt work like writing a paper or preparing a presentation. Realizing

: that the researchers control the funds and that they are underpaid for

: the amount of education and hard work that they have invested, it is

: easy to understand that they would resent paying market wages to someone

: doing a task that they perceive as easy.

The whole tone of this article is out of place in this newsgroup. I see no reason to pit ``researchers" (by which I assume you mean scientists) against programmers (computer scientists or whoever makes a ``market wage"). I have written many thousands of lines of (what you would probably call ``tangled") code, mostly in PV-WAVE, in the course of doing a PhD in physics. The programs I have written do what they are intended to do and were fairly ``easy" to write, but I'm not writing an operating system, a mass-marketed text processing program, or an air traffic control system either. I don't think it's scientists resenting programmers as much as it is lack of funding in science compared to Microsoft or wherever it is that pays ``market wages''.

Have a lovely day, Larry

Larry R. Nittler Human beings were invented by water as | Irn@howdy.wustl.edu a means of transporting itself from |

Subject: Re: Job Offer: Dept. of Planetary Sciences, Univ. of Arizona Posted by knighton on Thu, 01 Feb 1996 08:00:00 GMT

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In <4eolk1\$cad@newsreader.wustl.edu> lrn@wuphys.wustl.edu (Larry Roger Nittler) writes:

- > Ken Knighton (knighton@gav.gat.com) wrote:
- > : You must work in the bay area. The figure you give is no doubt greater
- > : than the salaries made by the Ph.D. researchers in that department.
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- > : easy to understand that they would resent paying market wages to someone
- > : doing a task that they perceive as easy.
- > The whole tone of this article is out of place in this newsgroup.

I apologize to anyone who is offended by the tone of my posting. My intent was not to offend, but to reply to another posting in which the poster was aghast at the amount of money being offered to hire an experienced senior-level computer professional. My reply was based on my own experiences and observations as well as those of others.

Actually, a lack of respect for the capabilities and hard work of computer professionals is by no means limited to a few federally funded researchers. This attitude can be found throughout the business community as well. It is amazing how many people believe that because they can write a macro for a spreadsheet program, they are a qualified computer professional.

This sort of reasoning is similar to a person thinking that they are an architect/general contractor because they once remodeled a house. Unfortunately, as human beings, we all have these little misconceptions from time to time.

We computer professionals are mostly to blame for this situation. We have not set professional standards for ourselves and organized ourselves into a powerful political force like other professions have done.

> I see no reason to pit ``researchers" (by which I assume you mean

scientists) against programmers (computer scientists or whoever makesa ``market wage").

My posting did not intend to pit one group against another.

- > I don't think it's scientists
- > resenting programmers as much as it is lack of funding in science
- > compared to Microsoft or wherever it is that pays ``market wages".

The original job posting was an insult to me in that it was asking for a computer professional who: 1) was senior level, 2) had 4 years of experience, 3) had in depth experience in several very marketable skills, but was offering a salary that was about \$15,000 less per year than is typically reported as being the average for a person with these qualifications. This is akin to asking someone to sell their home for fifty percent of its appraised market value. If they really want to hire an ex-graduate student and pay them an entry level wage, why don't they just say so?

Somehow, the people in charge of these big science projects find the money to budget for and pay market rate for facilities, fancy hardware, administrators, pencils, computers, and even the scientists themselves. Why then is a valuable support position that will be crucial to the success of this endeavor being offered at such a low salary? Remember, idealism aside, one tends to get what they pay for.

I personally admire the work that is being done by the scientists with whom I work and scientists in general. I feel that scientific and technological research and development is crucial to the long term success and prosperity of our nation. This does not change my opinion that all too often, critical support positions are overlooked or shortchanged in the budgeting process.

> Have a lovely day, You too.

Ken Knighton

knighton@cts.com

San Diego