

# Re: Binqry Tree sort

---

*Source:* <http://coding.derkeiler.com/Archive/General/comp.programming/2006-01/msg00512.html>

---

- *From:* [nejla.ghaboosi@xxxxxxxxxx](mailto:nejla.ghaboosi@xxxxxxxxxx)
  - *Date:* 16 Jan 2006 00:07:01 -0800
- 

To Willem:

> Mergesort or quicksort won't work because they have a sequential stage  
> that is  $O(n)$  and unparallelizable.

They are parallelizable. I read about their parallel implementation.

> Ah okay. Not sure if that makes much difference, just that you have to  
> choose your interconnects very carefully.

The interconnection between processors are like the connection between nodes of a binary tree.

> The simplest for would probably be a bit like a neural net, with several  
> rows, where each is interconnected with the next, two inputs and two outputs,  
> where the node simply puts the smaller to one output and the larger to the  
> other. Then is is a question of how to connect the nodes together.

Maybe you are right but I am not looking for an artificial life method like ANNs.

In addition we have a network (Sorting network) as a parallel architecture for just sorting elements of a set and its base structure is ODD-EVEN Network. and the procesors do a little the same as what you

mentioned. The processor elements have 2 inputs and 2 outputs. The first output will be the smaller value and the second output will be the greater value.

Re: Binqry Tree sort

But the processors which I want to use in my bianry tree architecture all have just one output and they send the data to the parent(Upward) and to two children downward through connections.

To Logan:

> Basically, the root node is a huge bottleneck.

The root node has no bottle neck becasue it just receives data from its

2 children not more than that. And all data go from each tree level to the next level, upward or downward, step by step & synchronously. Think

about the pipeline idea in Super–Scalar architectures .

To Chuck:

> You failed to quote context, making your post rather useless. That  
> is why I asked you to read my sig and the URL it points to before  
> posting again. Please do so.

OK Chuck. Is it true now?

To be honest I lost my self confidence. I'm a little afraid this time you say: you have to answer individually. :)  
Anyway, please let me know if I have other mistakes.

Thanks from all  
Nejla

.

---

• *References:*

- ◆ **Binqry Tree sort**  
◇ *From:* nejla . ghaboosi
- ◆ **Re: Binqry Tree sort**  
◇ *From:* Chuck F.
- ◆ **Re: Binqry Tree sort**  
◇ *From:* nejla . ghaboosi
- ◆ **Re: Binqry Tree sort**  
◇ *From:* Chuck F.
- ◆ **Re: Binqry Tree sort**  
◇ *From:* nejla . ghaboosi

Re: Binqry Tree sort

- Prev by Date: [\*Re: Binqry Tree sort\*](#)
- Next by Date: [\*Re: Binqry Tree sort\*](#)
- Previous by thread: [\*Re: Binqry Tree sort\*](#)
- Next by thread: [\*Re: Binqry Tree sort\*](#)
- Index(es):
  - ◆ [\*Date\*](#)
  - ◆ [\*Thread\*](#)