

University of
Kent



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ERLANG AT ERICSSON

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```
for(Max,Max,F) ->  
    [F(Max)];
```

```
for(I,Max,F) ->  
    [F(I)|for(I+1,Max,F)].
```

```
> for(1,5,fun(I) -> I*I end).  
[1,4,9,16,25]
```

RPC

```
rpc(Pid, Request) ->  
    Tag = erlang:make_ref(),  
    Pid ! {self(), Tag, Request},  
    receive  
        {Tag, Response} ->  
            Response  
    end.
```

RPC

```
rpc(Pid, Request) ->  
    Tag = erlang:make_ref(),  
    Pid ! {self(), Tag, Request},  
    receive  
        {Tag, Response} ->  
            Response  
        after <Time> ->  
            ...  
    end.
```

RPC split in two

```
rpc(Pid, Request) ->  
    Tag = erlang:make_ref(),  
    Pid ! {self(), Tag, Request},  
    Tag.
```

```
wait_response(Tag) ->  
    receive  
        {Tag, Response} ->  
            Response  
    end.
```


Futures

```
promise(Pid, Request) ->  
    Tag = erlang:make_ref(),  
    Pid ! {self(), Tag, Request},  
    Tag.
```

```
yield(Tag) ->  
    receive  
        {Tag, Response} ->  
            Response  
    end.
```

```
Tag = promise(Pid, fun() -> ... end),  
... do some computations ...  
Val = yield(Tag)
```



```
par begin  
  F1,  
  F2,  
  F3  
par end
```

pmap

```
function pmap(L) ->  
  S = self(),  
  Pids = [do(S,F) || F <- L],  
  [receive {Pid,Val} -> Val end || Pid <- Pids].
```

```
do(Parent, F) ->  
  spawn(fun() ->  
    Parent ! {self(), F()}  
  end).
```

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