

# In search of the perfect programmer

Peter Hilton • 42 KTM • 17 March 2010

#### The perfect programmer...

is something a lot of people have an opinion about

Being able to code is the only non-optional skill (no code - no software)

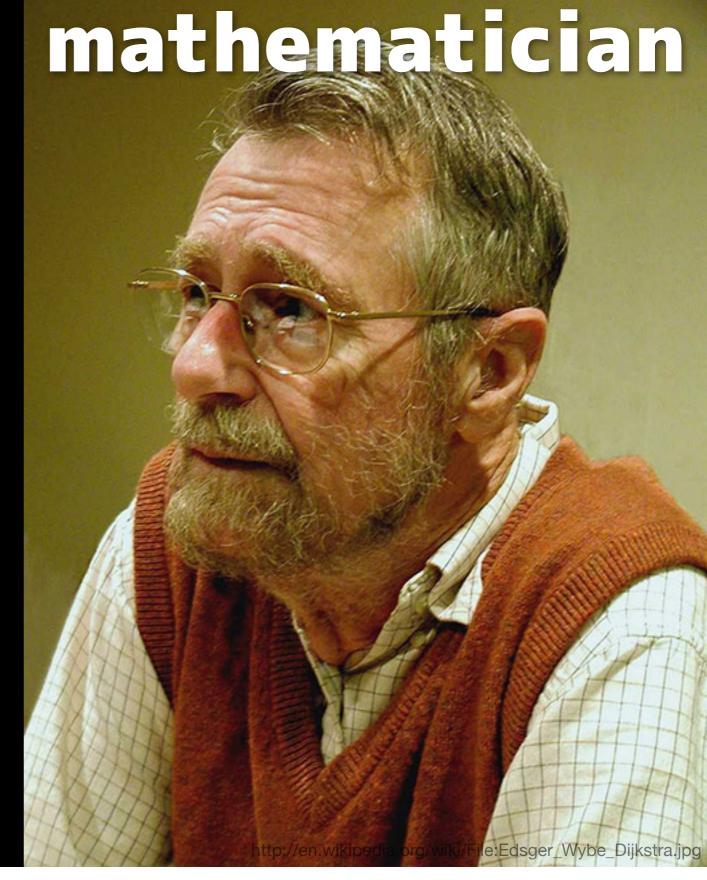
There are plenty other things you can be sufficiently bad at to make your project fail.





Edsger W. Dijkstra argues that computer programming should be understood as a branch of mathematics

Disclosure: I have a degree in pure mathematics

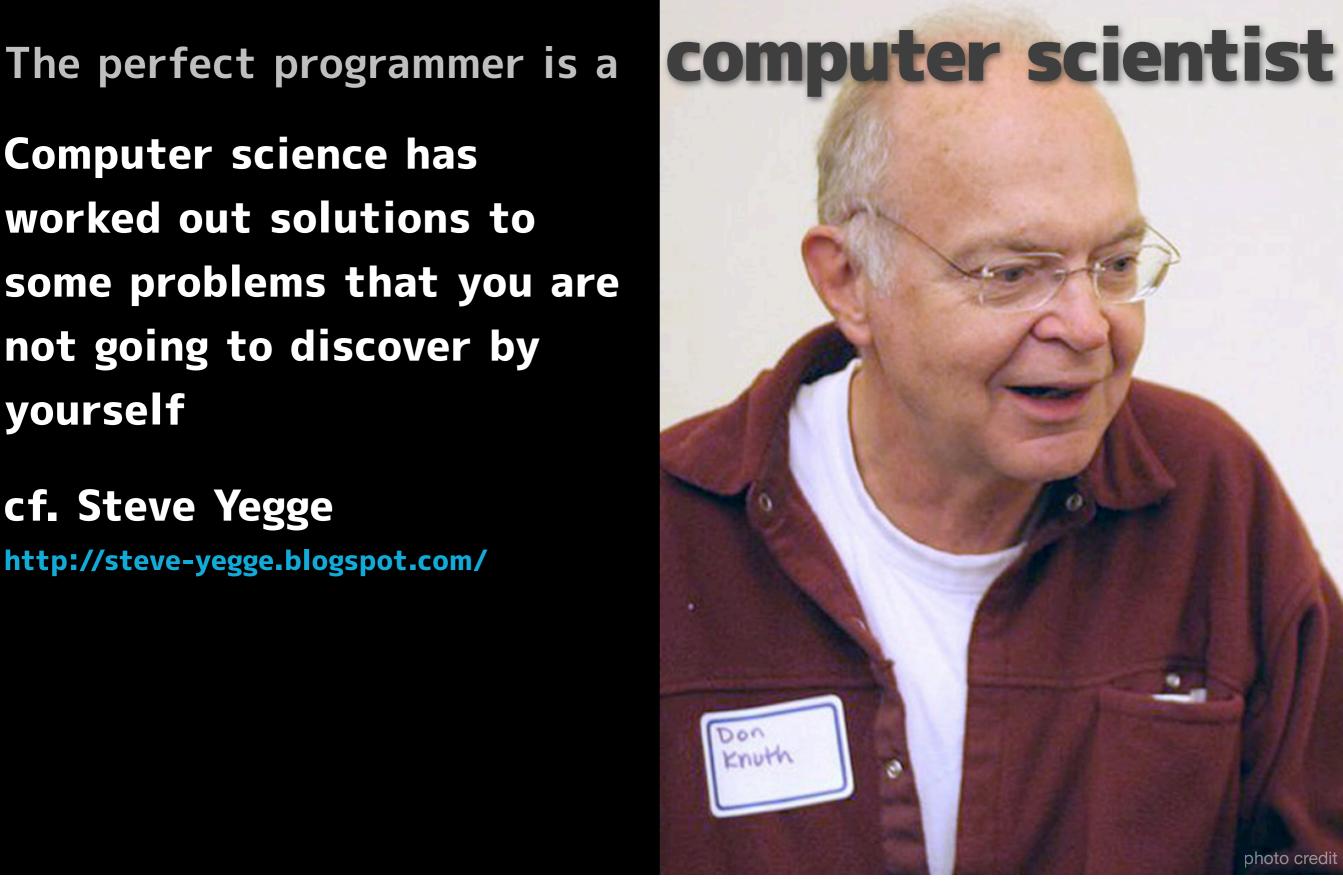




Computer science has worked out solutions to some problems that you are not going to discover by yourself

cf. Steve Yegge

http://steve-yegge.blogspot.com/





There is always a cost and a value, and neither tends to take care of itself

Larry Ellison (photo)
started his own company in
1977, after getting
inspiration from one of
Codd's papers

His personal wealth is now an estimated US\$ 22 billion





Most software projects require more than one person to contribute.

Ideally, everyone would all spontaneously want to do the same thing in the same way, at the right time.

Realistically, you need leadership (not necessarily a Roman emperor)





Interesting software is often new software that other people do not believe in yet

There is a first person to have the vision

There is also someone who can get things started





Women are not better or worse, just different

Your team is probably mostly men and worse off because of this lack of diversity and balance

Of course, a women-only environment probably is worse than a men-only one (unconfirmed)





**Most software** communicates visually

Visual design overlaps with user-interface design





When the talent are movie stars, they do not want to be kept hanging around.

Progress every day requires someone to constantly remove obstacles.





Forget theory: get your hands dirty

You have to be able to actually get things done

cf. Joel Spolsky's book: Smart And Gets Things Done





In the age of the mashup we are actually getting somewhere with software re-use and data re-use

Licensing issues remain complex





Projects tend to involve more people problems than technology problems

The software may be complex, but at least it does what you tell it to

Human behaviour is more subtle and complex





Library science is the art of information retrieval

Internet information systems are no mere library

Recommended book:
'Information Architecture
for the World Wide Web',
Morville & Rosenfeld

http://oreilly.com/catalog/9781565922822





Programmers communicate in writing a lot, with humans as well as programs

When you are explaining something complex, having a way with words is essential

Every software project I have ever worked on involved more English than any other language





Technically, it is easy for software to support multiple languages

However, programmers are not usually able to do the translation

Lack of language support limits software's global adoption, especially on-line





Programmers are rarely good at remembering meetings, organising things, expenses, calling people back, booking things, buying things, forms, etc.

Most programmers would love to have a secretary

but have to make do, and be their own secretary





## The perfect programmer is a Kung fu master



- What is the highest technique you hope to achieve?
- To have no software development methodology



Unrelated to programming, as such, but...

A brewer is your Subject Matter Expert

... once in your life, when your development project is to implement a Brewery Management System





The perfect programmer is a mirage in the desert of human imperfection





No one person is everything

A multi-disciplinary team can be, collectively

The smaller your team, the smaller your niche

The best programmers are not the top 1% of coders

The best programmers are good at more than one thing





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