

Digression: How to choose a thesis topic? A personal view

Serge Abiteboul

Disclaimer: do not follow these guidelines. Invent yours

How to choose a research topic?

Ask people!

- Ask you advisor
Proven 500 years ago to be questionable
- Ask your friends
Not so bad, but the risk is to loose some friends
- Ask your neighbors
Unfortunately, they are musicians and you don't want to change field
- Ask the web
soon: in beta test at Google

Theorem 1: Nobody will help you



How to choose a research topic?

It should serve some goal!

- One that will make you rich
If you want to be rich, go to industry
 - One that will make you smart
If you are not smart yet, leave this room
Please! I was just kidding... 😊
 - One that will make you famous
Yes, which one is it?
 - One that is useful
Forget it: the goal is not to fix the problems of the world
- Theorem 2: the *unique* goal of a thesis is to get a thesis**

How to choose a research topic?

Other possible criteria

- The most difficult one
First get a thesis, and then only you work on $P=NP$
- The easiest one
*The statement should be simple (positive elevator talk)
but the technology nontrivial (negative elevator talk)*
- The most popular one, e.g., a QL for XML
Not good – some of the others may be smarter than you
- The most esoteric one, e.g., loopfree ψ -derivation in λ XML
Not bad – no one will read your thesis, so it is unlikely that they will find bugs in it

Are you getting desperate?

How to choose a research topic?

Wake up! Good ones coming

- Some continuation/increment of some work
A bad idea: if they didn't do it, it is either boring, useless, very difficult, ugly or all of the above
 - **Something very new**
A great criteria for lazy people – if it is new, it is much easier to get new results
 - **Something very beautiful**
One great criteria (but be realistic, it will not improve your success with boy/girlfriends)
- Theorem 3: It should be new, beautiful, have a simple statement and be technologically difficult*



Main result

Theorem 5: You must choose a fun topic

Proof: by Theorem 2, you are going to have a hard time. By Theorem 1, Theorem 3 is bogus – do not believe anyone who claims to know the secrets for finding a topic

Thus, at least, you should enjoy doing it. \square



My quotes of the day

I have very high philosophical expectations of what a Ph.D. thesis should be, but I won't let that interfere with my main goal: to get one fast **(anonymous Ph.D. student in Marina del Rey)**

I had this idea of a Ph.D. topic. I got drunk. It still sounded like a Ph.D. topic. Then I decided it was one **(Ph.D. student in Cargese who asked to be anonymous)**

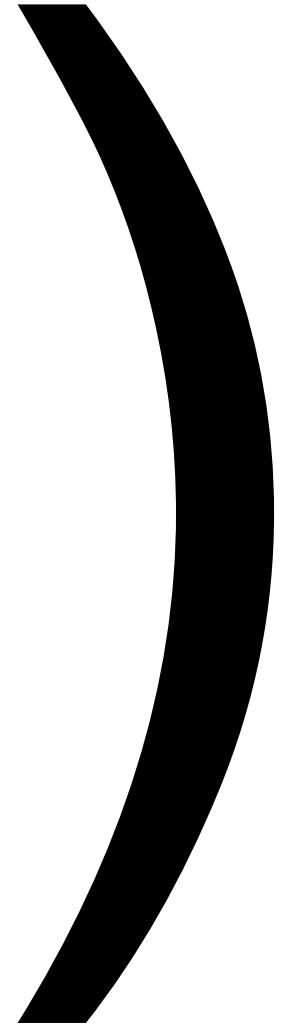


Checklist for a thesis topic on data and web services integration, AXML style

- Is this new? Yes
 - proof by syntax
- Is this beautiful? Yes
 - proof by authority
- Is the model simple? Yes
 - proof by repetition
- Is it technically deep? Yes
 - proof by experience
- If it fun? Omar says yes
 - proof by intimidation



End of
digression
–
Merci



End of the digression
Back to work

