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

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Disclaimer: do not follow these guidelines. Invent yours
How to choose a research topic?
Ask people!

- Ask your advisor
  *Proven 500 years ago to be questionable*
- Ask your friends
  *Not so bad, but the risk is to lose 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 $\psi$-derivation in $\lambda$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. □
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
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Merci
End of the digression
Back to work