Dilma’s musings on “What is life as a graduate Student?”

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How do I still know it?

• Long time ago …
• My path was very “focused”, dream-oriented. Many successful people have less-direct paths to graduate life
• My perspective now is a mix of:
  – nostalgic longing 😊
  – wish-list for the people I hire and collaborate with (and hopefully will work for one day)
  – advice I wish I had taken
Why? What?

• common reasons:
  1. Inertia
  2. Step towards a “successful” career path
  3. Burning desire

• Path without passion can be difficult. Better to think and talk to mentors a lot before/during the journey

• Trying research & technical depth for real!

• MSc vs PhD path
What is research?

We all do problem solving … research is about the OPEN part

- Either unsolved or existing solutions have flaws
- No blueprint to follow
- Straightforward approach by practitioners not enough

- Discover solutions
- Articulate convincing demonstration the approach works
- Systematic evaluation of strengths & weakness
- Positioning into existing body of knowledge

open problem solving
What is research?

Open problem solving

Additional aspects for industry research:
• Driven by customer needs
• Path to “real life”
• Additional constraints:
  • Legacy
  • Business models (cost!! market!!)
  • Product cycles
Grad student confidence “plot”

Admitted to grad school

First exam in a grad course

First PhD candidacy exam attempt

Pass PhD candidacy

Pass a thesis proposal

Searching for a thesis topic

Pass thesis proposal

First paper rejection

First paper acceptance

Pass final defense

Pass PhD candidacy

Admitted to grad school

(From CRA-W Grad Cohort presentation)
The “research” crowd

• It’s not about genius
• Passionate & smart is very common
• Skills to be refined/acquired/exercised while in grad school:
  – Abstraction
  – Solid knowledge & depth
  – Communication
  – Hands-on experience
  – Time management
  – Taking risks
  – Dealing with fellow researchers
  – Networking
You still have a life!

- There is exciting work to do … work-life balance may be a challenge for some people.
- There is *really hard* work to do … procrastination may be a challenge for many people … you may “waste” work *and* life.
- On a journey taking so many years, chances are that life will surprise you with additional challenges. Excellent practice opportunity!