My trip towards the PhD

Wei Song
Who am I

- Wei Song 4th year PhD
- Chinese citizen Come to UK from 2007
- Supervisor: Dr. Doug Edwards
- Advanced Processor Technologies Group (APT)

- Asynchronous communication in multi-processor systems (Computer Architecture)
- In UK: 8 publications (1 jour., 4 conf., 3 workshop)
- All: 16 publications (12 1st author, 3 co-author, 1 patent)
What I am doing here

• Tell stories of my PhD from the heart.

• Personal experiences
• Not verified understandings
• Unfair judgments
• Wrong ideas …. ?

• Ignore me! When you think I am wrong.
The reasons to be a PhD

• **Degree**
  - I don’t have it yet.
  - All the professors have it.
  - I can have better start salary.

• **Chance**
  - I can go aboard! (int. students)
  - I can learn something!
  - I can change my specialty.

• **Experience**
  - I am doing real research.
  - Perhaps the worst four years in my life? (I don’t think so :-)
  - I am improving the knowledge.
Feelings: confusing

In the first month of my PhD, I don’t know what I am doing.

• I don’t know how to research.
  – It is about new ideas + verify + publication.
• I don’t know how to start.
  – What about a small new idea?
• I don’t understand those papers.
  – Ask for help, start from review and books.
Feelings: frustrated

In the following several months, I am struggling to produce ideas.

• I don’t have ideas.
  – Small stupid one is better than nothing.

• Idea is old.
  – Be happy that someone points it out.
  – Be happy that some experts did the same thing.

• Impossible to verify it
  – Ask supervisor. Reproduce the old results.
Feelings: lonely

The first year is lonely.

- No one care, even my supervisor.
  - Everyone is busy.

- No one help me. I am on my own.
  - It is your job to verify your ideas.
  - You will be an expert as no one can help anyway.

- Research is boring.
  - Social networking, activities and parties.
Feelings: defeated

My first paper submission was rejected.

• Experiments or tests fail.
  – I cannot expect that every try returns success.
  – I will do it better next time.

• Paper rejected.
  – Be happy to have some criticism.
  – A fail rate of 60% is normal. (30~40% accept rate)
  – Start from easy conferences/workshops
  – Do not rush yourself for urgent deadlines.
  – There will be different reviewers 😊
Feelings: success, bravo!

• Conference paper accepted.
  – Prepare the presentation and enjoy the trip.

• Journal paper accepted.
  – Success PhD, try better journals.

• Invited paper review (not by supervisor)
  – Recognized by others (editors, authors).
  – Be fair and critical.

• Invited talk
  – Respect from others.
  – More preparation for the presentation.
Short history

- Sep. 2007 come to UK
- Aug. 2008 1st paper submission
- Sep. 2008 1st workshop talk (rubbish)
- Oct. 2008 paper rejected
- Mar. 2009 1st accepted conference (short)
- 2 conference papers in 2009 (short + poster)
- 2 conference papers in 2010 (regular)
- Jan. 2010 1st invited paper review
- Aug. 2010 1st accepted journal

- 5/8 62.5% accepted rate
Words afterwards

• Be yourself
  – Do not rely on your supervisor too much.
  – Every PhD is an independent researcher.
  – Consult to your supervisor but make your own decisions.

• Publish as early as possible
  – Start with easy and fast conference.
  – Improve the quality during the process.
Thanks for your attention.

Hopefully all of you will enjoy the years here...