Perspectives on Career Pathways
(invited talk for FIT Early Career Researchers)

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The Best Slides on Research/Academia

hard to find too!

Presenting Your Research: Papers, Presentations, and People

*Marie desJardins* (dig around to find slides)

AAAI/SIGAI 2017 Doctoral Consortium

Optimising your PhD and your postdoc life

Maria Garcia de la Banda (slides not public)

IJCAI 2017 Doctoral Consortium
Know Your Strengths  (and weaknesses)

▶ theory
▶ speaking
▶ management, networking
▶ business
▶ development
▶ teaching and supervision:
  ▶ undergraduate
  ▶ graduate
▶ entrepreneur

aim for the best, plan for the worst!
Long Term Planning

- family and lifestyle
- health
- being multi-disciplinary
- work with a mentor, and get some realistic role models
- develop application areas
- coding as a springboard
- dig in locally and build a team and develop connections
- be a hotshot in a mid-tier location or a struggler in a top-tier location?
- take the fast track or not-so-fast track
After a Postdoc

- another postdoc
- big labs R&D
- industry in
  - Australia
  - your home country
  - overseas
- academia in
  - Australia
  - your home country
  - overseas
Considerations

- family
- work freedom versus work life
- office politics
- research / writing / teaching / coding
- strengths and weaknesses
Sample Trajectories

- **Prof. Dinh Phung**, Monash (ARC career track)
- **A/Prof. Julian McAuley**, UCSD (overseas academic career)
- **Prof. Fang Chen**, UTS (industry lab., project lead, then academia)
- **Prof. Marko Grobelnik**, IJS (development, startups, local talent)
Preparing for Industry
from Maria Garcia de la Banda

Maria’s experience with industry says you should:

▶ Already have industry experience
  ▶ Look for industry internships and placements
  ▶ Participate in research projects with industry
▶ Sell yourself (specific skills and contributions)
  ▶ Industry seems a bit lost on what AI/IT is and can do for them
▶ Be a good communicator
  ▶ Get all the practice you can! (talks, interviews...)
▶ Have experience as a team player
  ▶ Even uni-based team experience helps
▶ Show initiative and leadership skills
  ▶ Extra-curricular activities help demonstrate this
Example Job Description of AU Academic

1. Conduct high quality research including publications in world-leading conferences and journals

2. **Supervise** of research students

3. Participate in successful research teams and foster interdisciplinary research

4. Prepare research proposals to obtain competitive external funding

5. Prepare and delivery of lectures and seminars, including the setting and marking of assessment

6. Coordinate and/or deliver tutorials, practical classes, demonstrations, workshops

7. **Supervise** and mentor of students engaged in coursework and research projects

8. Engage in professional activities, both internally and externally, including program committees, engagement with industry

9. Execute administrative functions as required to contribute to the operation of the Faculty

10. Attend departmental/faculty meetings and other committees
Preparing for Academia

- get a Turing Award
- get a Fields medal
- better yet, get a Nobel Prize
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Sorry, these aren’t realistic goals ... but these days, academia is very competitive!
Preparing for Academia
while a postdoc

- get tutoring and teaching experience (as a hurdle)
- practice giving talks (i.e., prepare for "job talk")
- make sure your English is good enough
- take on some research students
- see next slide on preparing for research
Preparing for More Research

- get a spread of 1st/2nd authorship papers
- get lots of joint research going (not just your supervisor)
- work on small grants
- organise workshops at conferences
- get to the important ideas sessions (e.g., NeurIPS Workshops)
- do lots of reviewing
- create a web profile
  - don’t forget your coding or other research artifacts!
- join the main professional organisations (IEEE, AAAI, etc.)
  - so you can become a “fellow” later on!
Work-Life Balance

- Spread of 1st/2nd authorship papers
- Get time off, organize, organize (not just your supervisor)
- Work on teaching, teaching
- Organize teaching, at conferences
- Get to the table, talk to others, show your work
- Create a web profile, don’t forget your other responsibilities

approved!
Work-Life Balance, cont.

Would a person who works an extra 15 hours/week get better achievements?
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- current management recommendation is you limit work to 40 hours
- we know deadlines requires this be broken
- work becomes increasingly less productive as you work longer
Work-Life Balance, cont.

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Can you put a dollar value on the lives of your children or spouse?
Handling Pressure

- exercise, meditation, external activities
- look after family
- eat healthy (see my webpage)
- stay organised
- prepare hard things early
- prepare easy things late (stops you overworking on them)
Questions?