

PhD Non-Academic Careers and Job Search

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Who are the folks in our neighborhood?

How many of you are:

- Undergraduates
- MSc students
- PhD students
- Others ?

Jamika's advice...

- Don't be afraid to try something new, outside your comfort zone
- Treat every opportunity you experience as one that makes you more marketable
 - Surround yourself with your own board of directors
 - Always think strategically about what lies ahead, even if you're not sure what you'll be doing or where you'll be



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Rita: “I Wish I Knew”

- Industry does lots of cool stuff, you just (mostly) don't hear about it (get an internship)
- You can innovate without writing papers: think patents, think impact, think touching people's lives
- Think of your career as your own startup
- Don't forget about life, think about cities that you would like to live in



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Deb's Networking Advice . . .

- Enjoy what you do
(Do a good job of whatever you work on)
- Work with people you like, build collaborations
(Treat everyone like they might be your next boss)
- Pay attention to how things work and what is typical
(resources, approvals, promotions, projects, etc)
- Learn from your failures
(Failures can lead to a bigger success than was possible before)
- Don't be afraid to ask for advice
(It makes you look smart)

Have patience – your career is long



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Industry to Academia

Academia	Industry	National Lab
Active publishing in top tier conferences	Must build “real” systems	Mix of building “real” systems and publishing
Active collaborations with academia	Up-to-date technical skills	Active collaborations with labs and academia
Establish visibility in research community	Understand business roadmaps	Address agency mission critical problems
“Soft” money	“Hard” money	“Soft” and “hard” money



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Engineer or Researcher

Engineer	Researcher
Deep technical expertise: design, coding, testing, analysis	Proactive leader for innovation (applied research)
IP: patents & papers	IP: foundational inventions
Employer's bottom line: <ul style="list-style-type: none">• Supports the sales process and ongoing customer satisfaction• Proactively pleases customers	Employer's bottom line: <ul style="list-style-type: none">• Bolder stance (higher risk)• Seeks productive partnerships with other business units and external collaborators



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Becoming a Technical Leader

- Act like one: Show initiative & vision.
- Be trustworthy
 - Follow through on commitments in a timely fashion.
 - Treat people fairly and with respect.
- Demonstrate ability to work with others
- Let people know you are interested
- Work to acquire qualifications
- Find a mentor to help



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Backup Questions

- Do internships matter?
- Can I publish papers?
- How do you find and get on projects?
- What is the interview process like?
- How important is teamwork versus individual work in your environment?
- What is the career path of a researcher in your organization?
- Is it possible to switch during your career: Industry/Academia/National Laboratory/Funding Agency/Non-Profit?



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