Academic vs. Industrial Research Jobs

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Longer version: http://www.cs.princeton.edu/~jrex/talks/research-jobs.ppt
Choosing Industry Over Academia

• Strategic aspects
  – Switch research areas to data networking
  – Industry experience would enhance research & teaching

• Personal taste
  – Enjoy tech transfer and working on real-world problems
  – Focus exclusively on research work for a few years
  – Like AT&T from my summer job experiences

• Balancing trade-offs
  – Wanted to do research, teach, stay professionally active, mentor students, and so on
  – Possible in industry, in different proportions and ways
  – This balance is harder to strike in industry labs today
 Choosing Academia Over Industry

• Personal growth
  – Take on new set of professional challenges
  – Ready to (try to) juggle more responsibilities
  – Feeling a little too “comfortable” in the work I was doing

• Shift in research direction
  – “Clean slate” research, building on operator perspective
  – New research topics, and connections across disciplines

• Interaction with students
  – Happiest in summers when students were around
  – Wanted opportunity for teaching

• Balancing trade-offs
  – Striving to stay grounded in reality, with extra effort
What Does Industry Look For?

- **Subject-matter expertise**
  - Knowledge of an important technology or problem area (e.g., a particular protocol)

- **Problem focus rather than technique focus**
  - Emphasis on formulating and solving problems, moreso than applying a particular technique
  - … though having a special hammer is good, too!

- **Willingness to jump right in**
  - Talk to practitioners, write code, collaborate with others, be a “hub node,” share your expertise, …

But, this varies a lot across companies and groups
What Does Academia Look For?

• Research agenda
  – Intellectual contributions, and perhaps practical impact
  – Publications and research funding
  – Novel ideas, and a larger arc to the work

• Professional visibility
  – External visibility through awards and leadership roles
  – Citation of your papers and/or external letters
  – Success of your PhD students

• Good citizenship
  – Teaching and advising
  – Service within the university, and externally

But, this varies a lot from one school to another