

IBM Research Division



- World's largest IT research organization
- Over 3,000 scientists and engineers
- 8 labs located in 6 countries

IBM T.J. Watson Research Center

- Yorktown Heights, NY
- Established 1961
- >1,750 scientists and engineers
- Research in IT Hardware (microelectronics, systems), Software, and Services



My Path

1987-1991 college

B.S. -- physics, mathematics

1991-1996 graduate school

A.M., Ph.D. -- physics

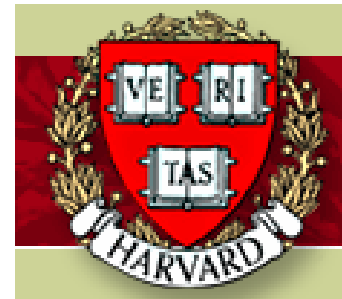
1996 job search

1996-1999 IBM Research

Silicon Technology Department

1999- IBM Research

Physical Sciences Department



“Industry or Academia?”

How do you decide? What’s the difference? Are there other choices?

Suggestions (things I wish I had done):

- **Talk to people**
friends, collaborators, mentor programs, alumni networks, professional societies
- **Find ways to see/work in an industry lab**
internships (paid or unpaid), collaborations, lab visits, lab tours
- **Seek out opportunities to present your work**
conferences, posters, host visitors, group meetings
- **Think about which aspects of research you enjoy**
attending conferences? writing papers? being in lab?
- **Don’t be afraid to admit to yourself what you DON’T like**
- **Smart. educated people can create opportunities**
look at “non-traditional” options

How do I pick my research directions?

- **Every researcher has performance reviewed each year**
- **In general, “good” performances come from two sources:**

Scientific contributions:

- published papers
- invited conference talks
- organizing conferences/sessions

Contributions to IBM:

- patents
- help development/manufacturing
- customer interactions

Most successful research programs attempt to contribute to both

This has consequences:

- less physics, more engineering
- shorter project timescales

Why have I chosen this career path?

GOOD

- + independence; freedom to pursue ideas
- + opportunity to work in technology
- + creative outlet
- + internal funding
- + publish papers/attend conferences
- + patent ideas
- + work with smart colleagues
- + flexible work hours/decent salary

NOT AS GOOD

- work for a big company
- research not always viewed as relevant to the company
- subject to economic ups and downs
- little budget control
- little technical support