

Working in the Real World



Reality

The Real-er World

- Industrial Research
- Large company
- Startup/small company

Industrial Research

- Like academia
 - Without the students
 - Shorter funding cycles
 - No tenure

But Different

- Labs have different funding models
- Teams are smaller and more experienced
- You don't (usually) start as a PI
- Goals can be different
 - Technology transfer
 - Financial justification
 - R and D (you need to build things)

Large Company

- Large can mean different things
 - Anything above 100
 - Orders of magnitude matter
- Stability
- Interesting projects
 - Lots of resources

Differences

- You start at the bottom/middle
- You build rather than research
- Goal is a product
 - May be internal
- You might publish
 - But it isn't a main goal

Startups/Small Company

- You might start at the top
 - But that's a problem
- You will learn a lot
 - No real job description
- Rewards can be huge
 - Unlikely

Differences

- It's all about the product
- Everyone has to do everything
- It is pure engineering
 - Do it cheap, fast
 - Good enough
- VCs are not your friends

For any of these

- There are some different skills
 - Working in a team
 - Bug fixing
 - Software process
 - Code reviews
- You will spend the first six months learning

How to get a job

- Time scales are different in industry
- Industrial labs
 - Helps if you know someone (internships)
- Large companies
 - They recruit
- Startups/small companies
 - Luck-- just ask if you see one

Why do any of this?

- More jobs than academia
- If you like to build, this is the place
- The pay varies from good to holy shit...
- There are interesting problems to be solved

And the two are not
mutually incompatible...