

About Me: Min Wang

Engineering Director



Past Experience

- SVP and Head of Research



- Senior Staff Research Scientist and Research Manager



- Distinguished Technologist and Director



- Research Staff Member and Research Manager



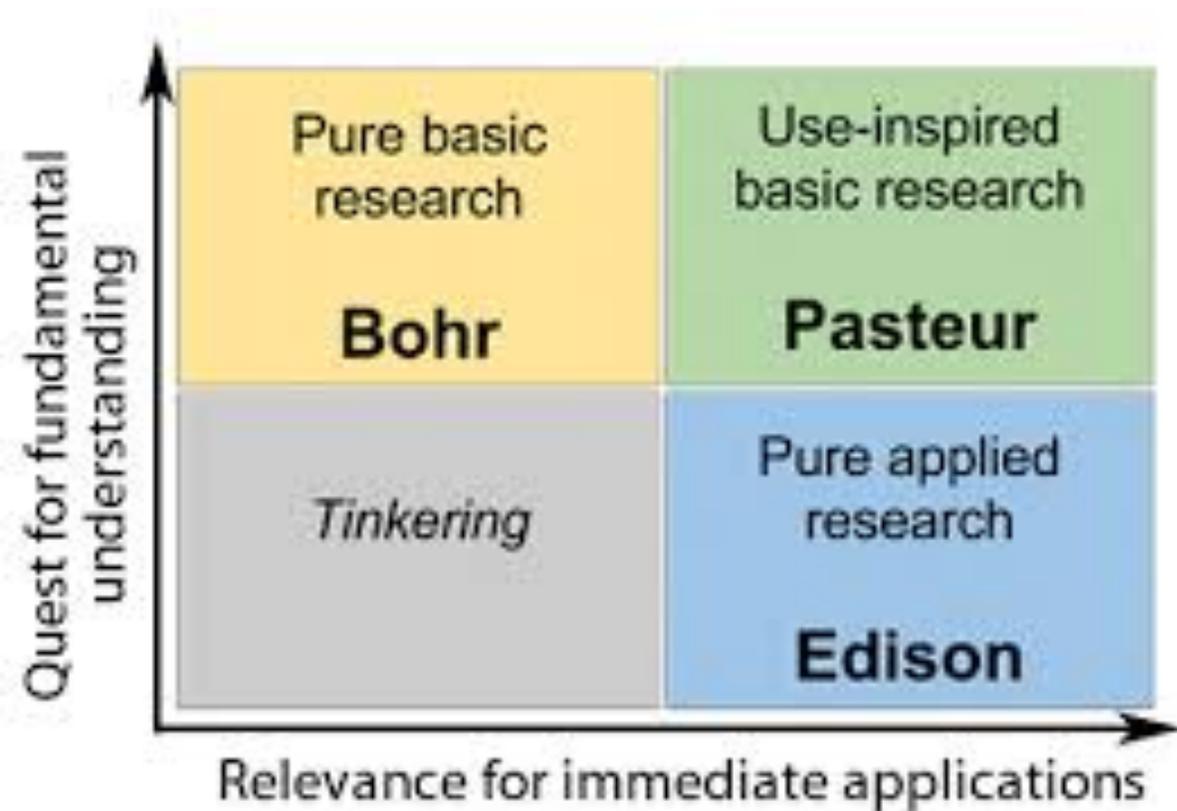
Research Interests

- Database Systems
- Information Management
- Machine Learning

My Passion

- Building **easy-to-use** software products
- **Bridging** the gap between research and product development
- **Mentorship**
- **Running!**

Transition on the types of research in industry



- Starting with a good balance of long-term basic research and long-to-mid-term user-inspired basic research—not necessarily in the areas of the company’s existing products
- More and more weight is put on user-inspired basic research with clear mid-term impact and applied research in solving short-term product problems and enhancing existing products
- The new research labs: Focusing on only applied research that has clear business impact to the company’s core business

What drove the transition?

- The value proposition of a research organization
 - Old labs: How is it measured
 - New labs: What is it?
- The fast pace of innovation in IT industry
 - The value of long-term exploratory research is questioned, maybe rightfully
- The advanced research training of engineering team (for some companies, e.g., Google)
 - Research org is not the only place research is done

What does it mean to Ph.D. students who pursue industrial research career?

- **Solid CS research training is even more important!**
- Be more hands-on
 - A good researcher must be a good engineer
- Be a good team player
- Understand non-technical constraints and deliver effectively under the constraints
- Focus on solving 80% cases well instead of beating the last 5% cases to death
- Strike a good balance in building your own research brand vs. picking up new topics quickly
- Internship is a good way to start

Measurement: the lab and the researcher

- The four Ps for the old labs
 - Publications
 - Patent/IP
 - Product impacts
 - Publicity: professional service, best paper, etc
- The new labs
 - Business can be in highly regulated industry: e.g., payment
 - There is no tradition of research publication
 - Patent is important, but may prefer trade secrets
 - Product impact is very important
 - Researchers may be measured in the same way as engineers
 - Publicity? Maybe...

Move from industry to academia

- Harder
 - The nature of the work done at industry
 - Lack of publication
 - Narrow focus
 - Attacking problems under very special constraints
- Not impossible, but window of migration is much smaller
 - Old labs, old time: a top industrial researcher could move to academia with 2—30-year tenure in industry
 - New labs: One may need to make the decision much sooner