# Planning a Research Career in a Rapidly Evolving Technology Landscape

From the IEEE Young Professionals Program at GLOBECOM 2024

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# Primary Goal of Supervising PhD students and Postdocs

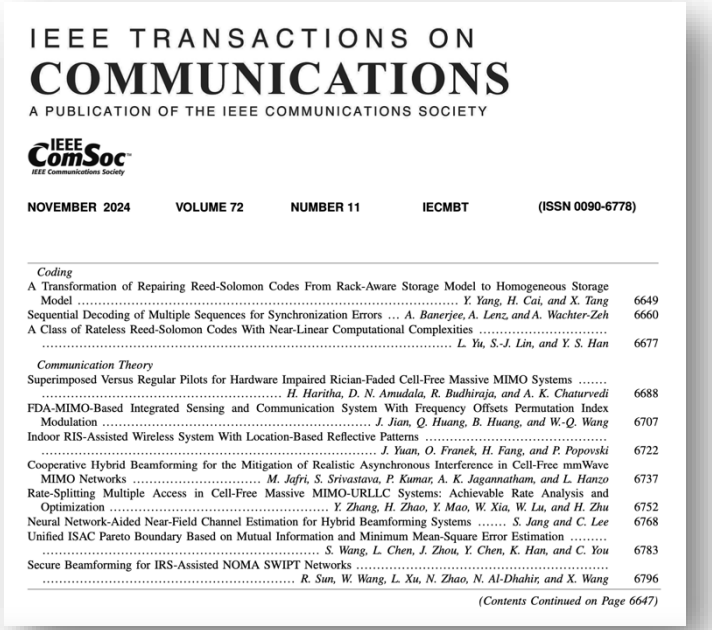
Train **you** to become an independent, knowledgeable researcher!

Your research output is not the primary goal!

*(You have a long career in front of you)*

# Why publish research?

1. From idea to rigorous science
2. Share new knowledge
3. Develop the ability to present, discuss, and defend your research outcome

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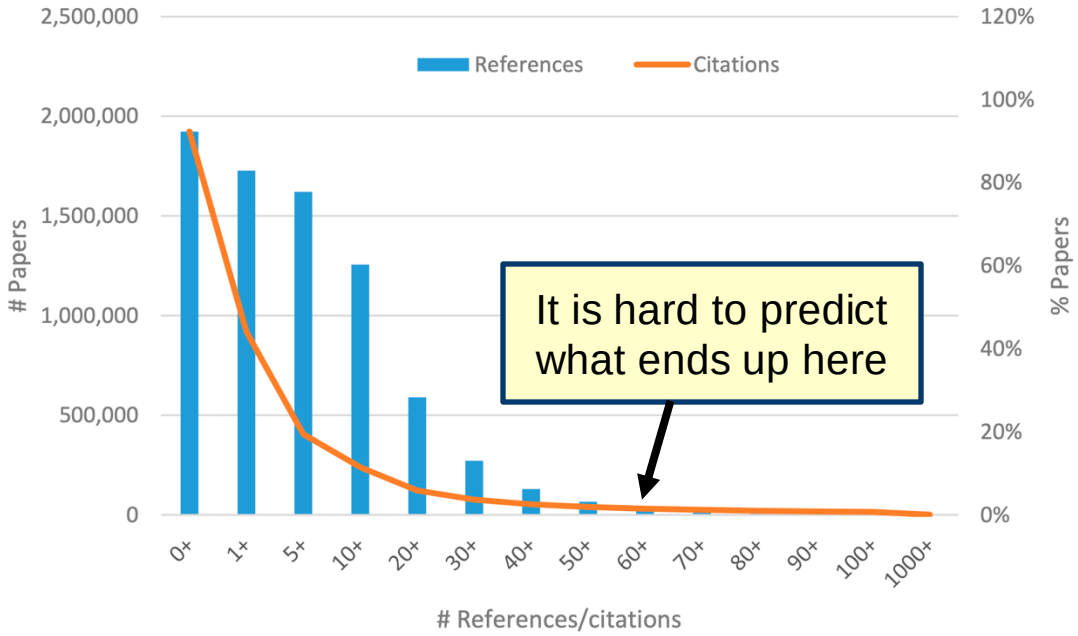
# Don’t Stare at Citation Statistics!




**There are many years of delay!**

**Open access and code sharing**: Encourage others to read and improve

Dalibor Fiala, Gabriel Tutoky, “*Computer Science Papers in Web of Science: A Bibliometric Analysis,” 2017*

# Focus on **Methodologies** *not* **Applications**

**Methodologies**

Communication theory

Signal processing

Machine learning

Queuing theory

Optimization methods

Prototyping

…

*Slowly evolving*



**Applications**

MIMO communication

Near-field communications

Reconfigurable intelligent surfaces

Radar sensing

Satellites

…

*Rapidly evolving*

# “Most people **overestimate** what they can achieve in **a year** and **underestimate** what they can achieve in **ten years**”

- Set ***long-term goals*** and ***short-term actions*** – *say “no” to other things*
- Find what ***you are good at*** and ***like to do*** – *don’t compare with others*
- ***Challenge yourself*** - develop non-technical skills

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Some of my own actions: