

**Choosing a Research Topic**  
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**Research**

1. Finding a research topic
2. Finding an advisor
3. Doing Research

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## Research Topic




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## Research Topic

### Who are you?

- Are you interested in theory?
- Are you "applied"?
- Are you interested in graphics?
- Are you interested in software/hardware?

### What are your personal goal?

- Industry
- Academia

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## Topics in Compute Science

- a. Security:** network security, system security, formal methods, social networking, mobile security (especially cell phones)
- b. Theory:** computational geometry, computational biology, cryptography, algorithms, optimization
- c. Systems:** programming languages, parallel computation, operating systems, software engineering
- d. Networking:** optical, wireless, ad hoc, sensor, protocols, cognitive, security
- e. Architecture:** VLSI design
- f. Graphics:** visualization, rendering, animation, geometric modeling
- g. Databases and information systems:** provenance, data sharing, incomplete and probabilistic databases, security Artificial intelligence: machine learning, data mining

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## Research Topic

Read, Read, Read

Get exposed to research

Independent research project

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## Research Topic

Read, Read, Read

*Read intelligently, critically, actively*

Get exposed to research

*Get informed! Listen to NPR,  
read magazines  
Go to seminars*

Independent research project

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## Independent Research Study



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## Finding an advisor



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