I am another You

We should have worked hard enough in order to be lucky – Vishwanathan Anand

by

Manas Thakur

August 24th, 2015

Who am I?

- A KITSian
  - B.E. Computer Technology (2009 - 2013)
  - UT, UR, CR
- Placed in Persistent Systems Ltd.
  - Didn’t join!
- Cracked GATE-2013
  - AIR: 780
  - Percentile: 99.65
- Research scholar at IIT Madras (2013 - present)
  - Dual-degree (M.S + Ph.D)
  - Associated with: PACE Lab, Department of CSE
  - Area: Program Analysis

Who am I?

A friend, alumnus, student

I am another You

Programming Languages, Architecture and Compilers Education Laboratory

What does a B.E.@KITS give you?

- Excellent command at fundamentals
  - Think beyond university exams
  - Very helpful for GATE preparation

- All-round growth opportunities
  - Leadership and organization skills

- Ample time
  - Most of us actually read only during exams

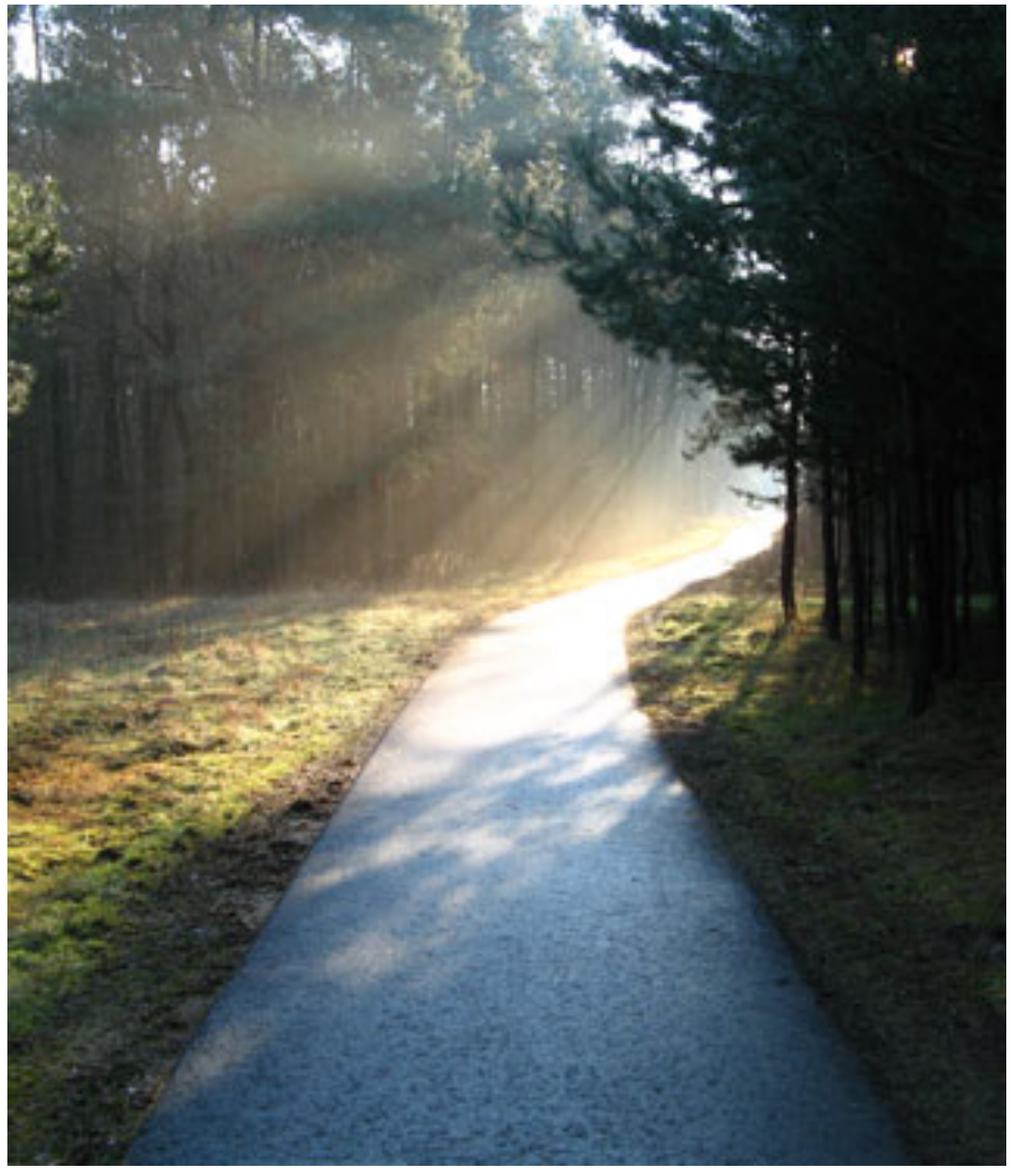
IT'S ABOUT TIME

Check Your Eyesight

Know what you want to be after BE

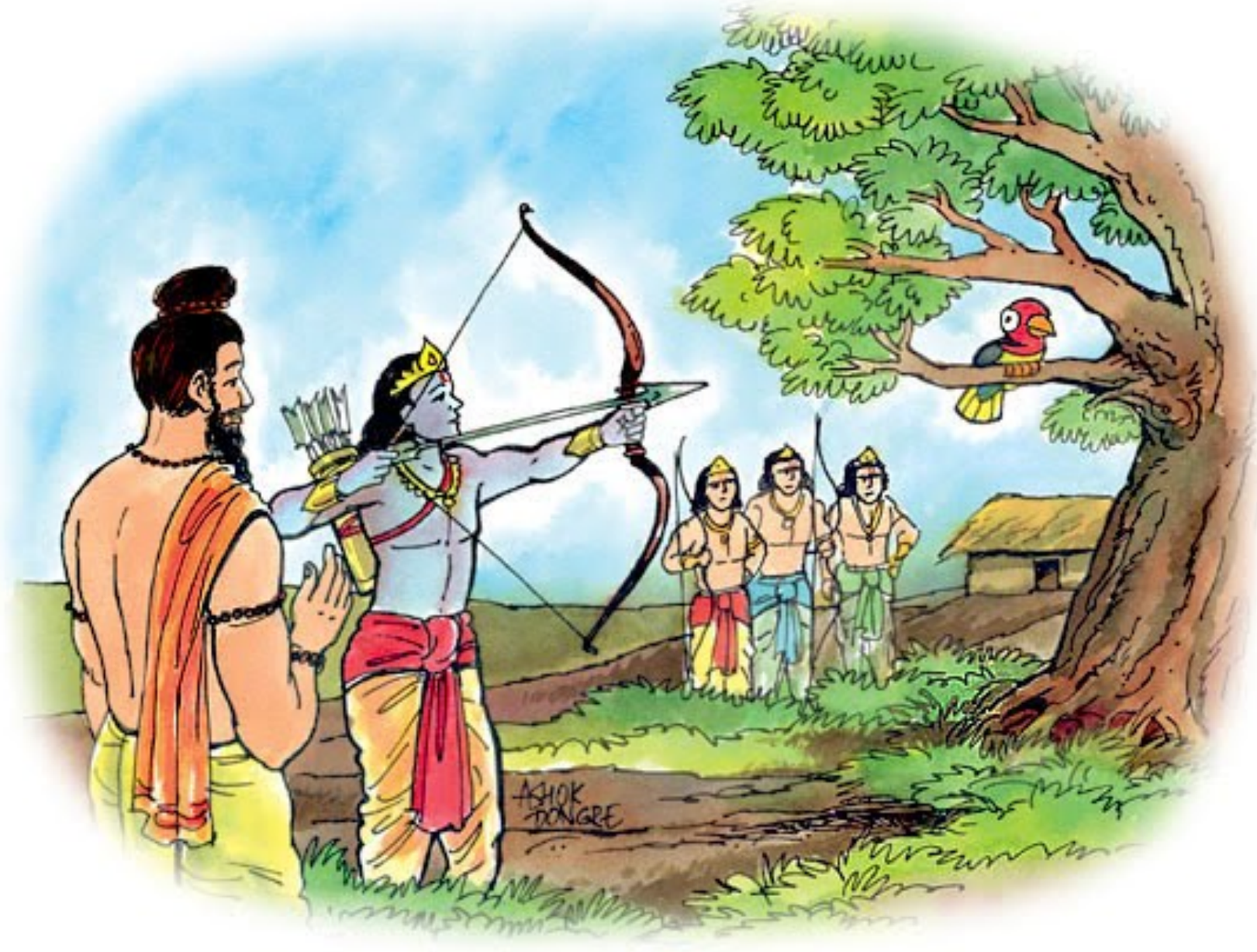
Figure out the path(s)

Stick to Ethics: ends don’t justify the means



Move ahead

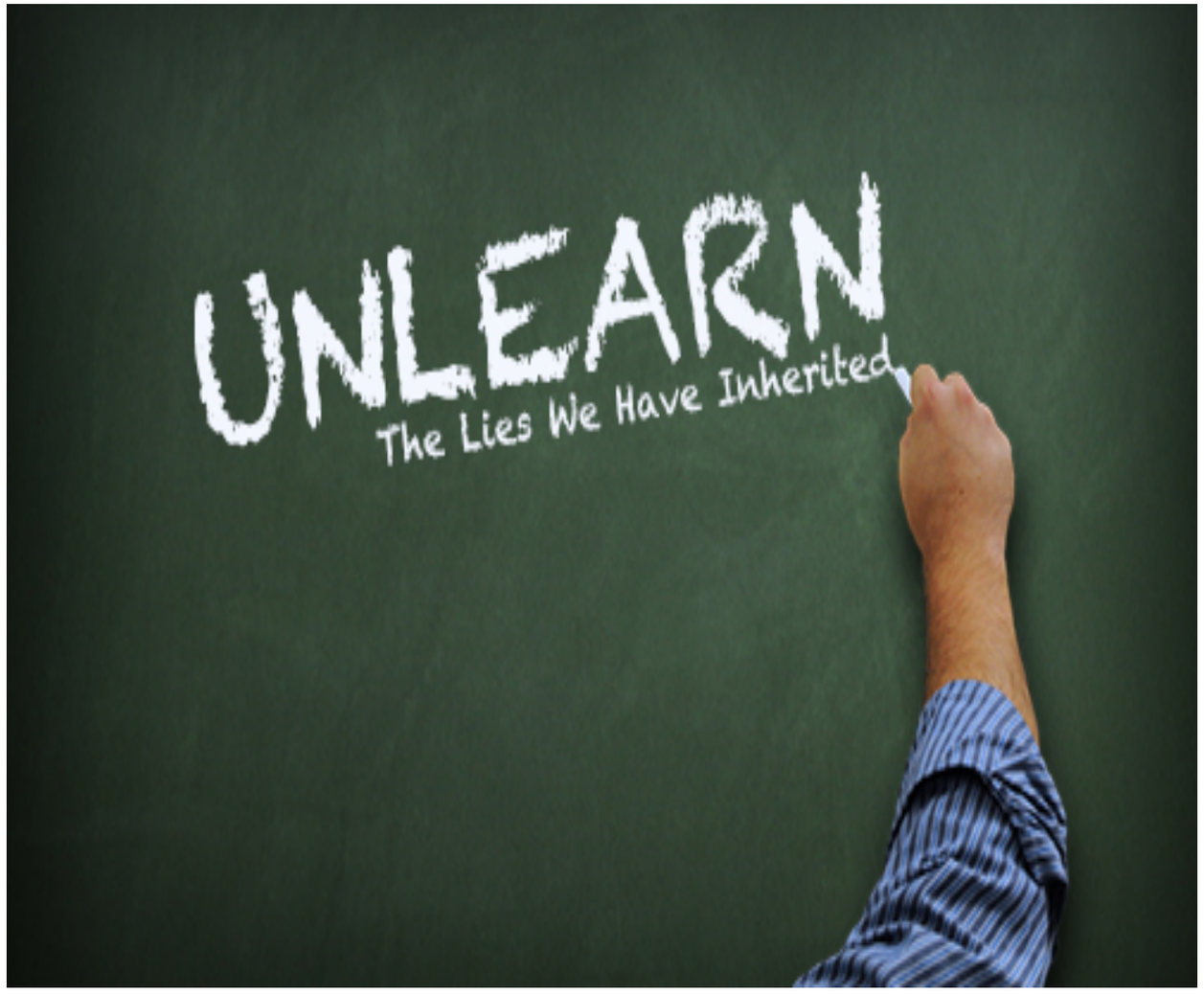
Avoid distractions but be aware



Survival of the Harmonious

Things to “Unlearn”

- Memorizing things
- Non-standard books
- Preparing for exams
- The “Blame Game”
- The Sir-Mam culture



Things to Learn

- Being active
- Taking responsibility
- Managing time
- Communicating effectively
- Using Internet

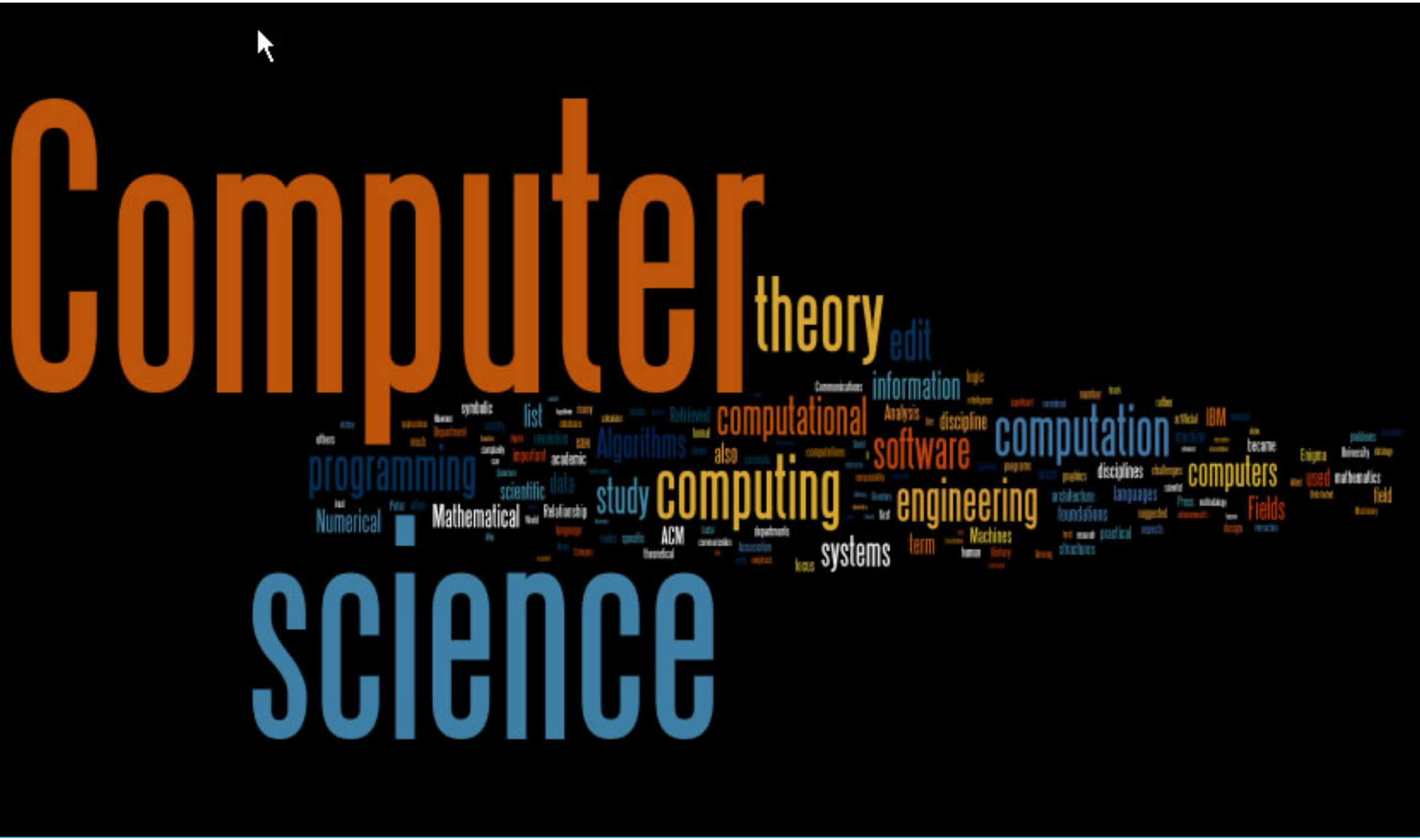
Communicating effectively

- Read
  - Books
  - Novels
  - Magazines
- Write
  - BUGS in Writing
  - The Elements of Style
- Speak
  - Get involved: debates, discussions
  - Word Power Made Easy

Using Internet

- Think beyond Facebook
- Technical help: Stackexchange/Stackoverflow
- MOOCs: NPTEL/MIT-OCW/Udacity/edX/Coursera
- One site to rule them all: Youtube
- Take certified courses from IITs/IISc

CS-Specific


Computer
theory
edit
information
computational
computation
software
programming
computing
engineering
computers
Algorithms
study
Numerical
Mathematical
systems
Fields
science

The UNIX Philosophy

- Use a Linux distro for programming
- Experience the power of Terminal
- Learn Vim editor
- Prepare documents using LaTeX
- Write shell scripts
- **Takeaway: Go use command line**

Efficient Programming

- Algorithm design & analysis
- Computer architecture
- Systems programming
- Compilers
- Parallel computing
- OS fundamentals
- Scalability (Big data)

Improving Online Presence

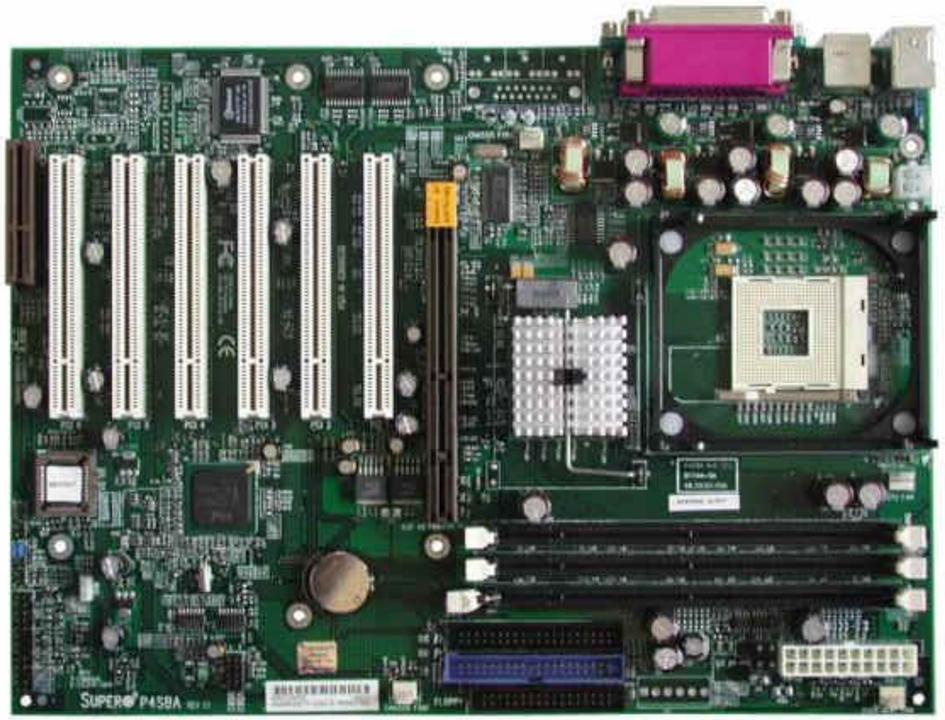
LinkedIn

WordPress

Cracking the GATEs of IITs/IISc

1. Choose your favorite GATE subjects
2. Read and understand all text books
3. Start preparing before 7th sem
4. Stay away from All-in-One guides
5. Join a good test series
6. Practice previous-year papers
7. Join “Gate Guidance” group at Facebook
8. Apply wisely at various institutes
9. Check places with double/triple filtration
10. Low score: Look out for winter admissions
11. Know the difference between industry and research careers

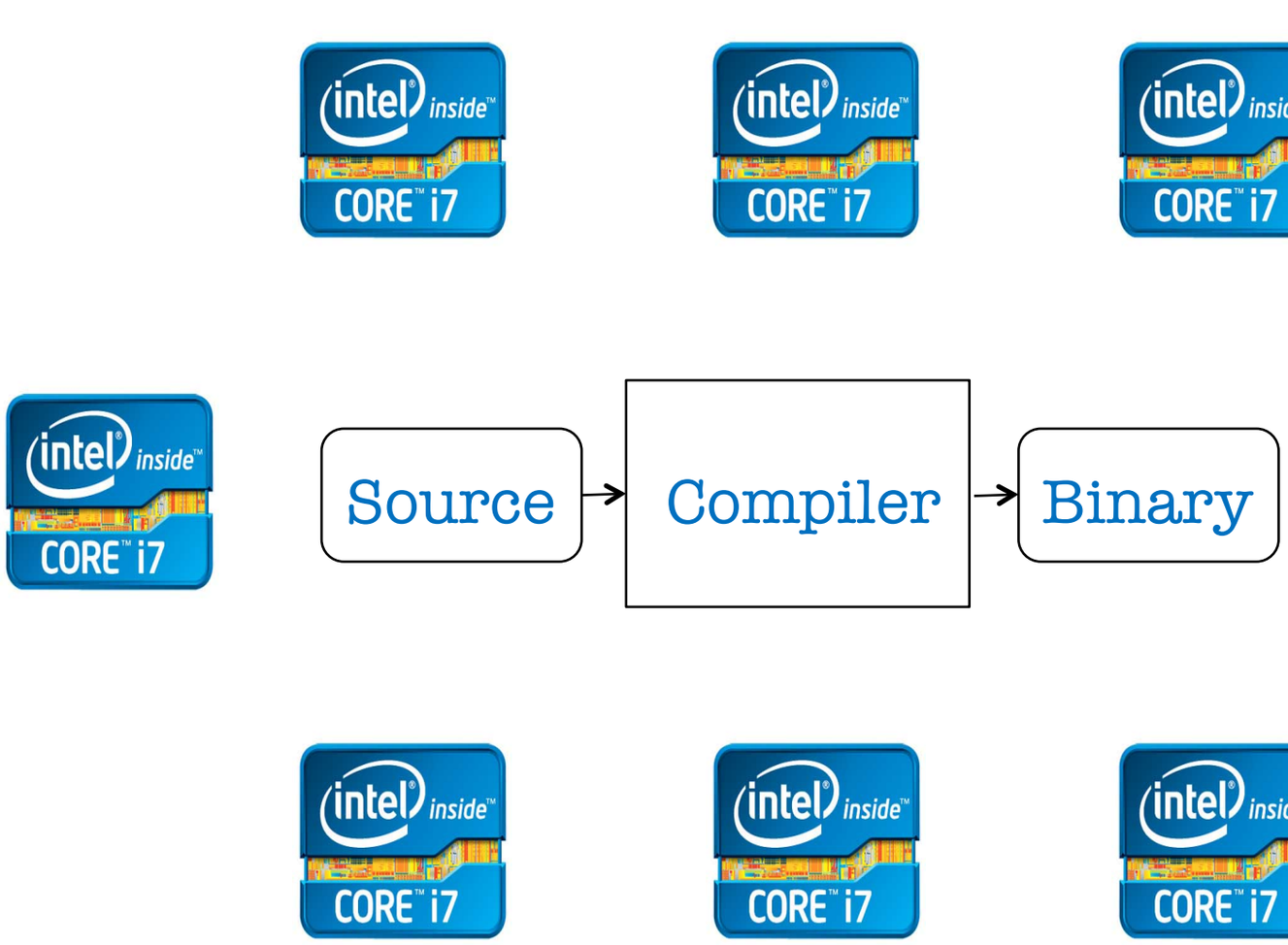
Research in Computer Science



```
void bubbleSort(int ar[])
{
   for (int i = (ar.length - 1); i >= 0; i--)
   {
      for (int j = 1; j <= i; j++)
      {
         if (ar[j-1] > ar[j])
         {
               int temp = ar[j-1];
               ar[j-1] = ar[j];
               ar[j] = temp;
   } } } }
```

$\sum_{i=0}^{i=n} O(i) = 1 + 2 + 3 + \ldots + (n-1) = O(n^2)$

My Work



Welcome to Chennai

Welcome to IIT Madras

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Welcome to IIT Madras

Stay Hungry, Stay Foolish, Stay Connected

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