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# INPHASE

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#### **5th Semester Tips**

- 1. DSP(Kannan Karthik): don't rely on relative grading, try to score max marks. When answering questions, write everything you know, every analysis you can make. He keeps partial marks for them.
- 2.Control systems(Mahanta): Do prev years qn papers. Questions will be simple but you will not get time if you had to think twice. So practice.
- 3.Digital comm(Rajesh): Study the vector/matrix maths(eigen fn, matrix transforms). Question paper will be tough and grading will not be that much relative(not all of top 10% will get A+ if marks is less. Try to get above 72 after end sem).
- 4.VLSI(Gaurav Trivedi): Do the project. Makes a lot of difference.



5.Comm lab: Follow instructions as said by the mail which you will get/ already got. Draw graphs properly in graph paper (esp if Rajesh sir is there).

6.VLSI lab: just listen to instructor.

7. HSS HRM(Nachiketa Tripati): Study the paper. If there are 2, study the lengthier one. Also by heart/study well all the points in the notes.

# **INTERNS**

Internship: The rules told by internship cell are implemented very strictly. So try to make up mind about whether to do research or industrial intern very quick.

My opinion is research intern is useful if:

- 1. You want to do higher studies in US. Because good research papers and recommendations matter
- 2. You did not get into goldman/ITC and do not want to take PPO of other companies which come for intern
- 3. You are not sure what to do (in this case only slightly better than industrial)

Industrial intern is useful if:

- 1. Want to take PPO( Pre-Placement Offer) and enjoy 7th sem.
- 2. If the tag of the company is good during placements next year.
- 3. Want to earn some buck and you are not much interested in doing higher studies outside India.



Author: Vijay Vishwanath { 4th year, ECE ; Intern at QualComm.}

# **Drop: An Alluring Poem**

One drop trickles to join another,

Many such strands coalesce to form micro-canals,

Many such micro-canals merge to form a stream,

Many such streams • ow into a river,

Many such rivers finally join the vast expansive ocean.

Creativity begins with a pure THOUGHT,

A thought, devoid of conditioning,

A thought, that brings happiness unbound,

A thought, that separates us from the plane of knowledge,

A thought, radiant, fresh and free,

A thought, most of all, €illed with love.

Latch on to this thought,

This is your child,

Hug it, hold it and nurture it,

Shape it, water it and build on it,

But most of all remember to love it.

Years from now, this thought,

Will become, a sub-conscious living legend,

A part of your soul, A pillar of support,

A true reflection of your principles,

Your very principles,

Which have stood by you in the toughest of moments.

From a pure drop to a fortress,

From a strand to an ocean of knowledge,

You are everywhere, across time and space,

Monumental in character, Supreme in intellect,

Multidimensional in vision,

Most of all full of love and simple at heart.





What can the Gods take back from you?

Dr. Kannan Karthik (Jan 25, 2014)

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#### **Reply From Professor**

Dear X,

It was indeed a pleasure to know that you and 25 of your friends from your de – partment are interested in doing an internship in my lab with my research group which has but five people.

Your email in particular was exceedingly fascinating. Allow me to make a few remarks about the contents of your email and your Cur – riculum Vitae.



- 1) I found it highly commendable that you have and I quote-' Read all of my papers and my books' which is in itself an achievement considering that I have published over 300 papers and have authored more than 10 books. Good Job!!
- 2) You must indeed be a proficient researcher as you claim to 'be fully capable of using an Oscilloscope of Yokogawa make' as mentioned under the 'Technical Skills' section in your CV.
- 3) One of the 'challenging' projects you have undertaken included one on making a 16 bit counter. This may well indeed entitle you to a position at a uni versity far better than the one I work at. I recommend you go ahead and apply at MIT.
- 4) Yes, even though 'winning a singing competition in 7th grade' is something that must have earned you numerous admirers, I doubt it if it ever counts for a lot when you apply for a research internship.
- 5) I see that you have played instrumental roles in the organising of almost each of your college's fests. It confounds me how a student can manage to be so versatile. It must take a lot for a student to juggle all of this with undertaking pro jects like 'making counters', and 'remembering all the resistance colour codes.'

I found the emails and the attached Curriculum Vitae of a number of your friends who have been kind enough to drop me mails, also very interesting. I am sure that you shall one day make some other Professor at some other univer — sity very happy with your work. It pains me to tell you this but I cannot offer you an interim position in my labo — ratory, as you seem to be too over-qualified for such an assignment.

Thanking you.
Yours sincerely,
Professor
Department of Electrical and Computer Engineering
University of

# **Love-Letter from a Microprocessor to a Code**



Miss Codeshwari.txt

Oset no. 2H. Index no.32H

Tag 25083H, RAM-II

Dearest Codeshwari,

Last week I saw you travelling in the nearby data bus. You were in a simple and traditional binary dress(I loved it). Your first look was like a TRAP interrupt to me. Since then I have not been able to execute anything properly. I have even witnessed a dip in my CPI (cycles per instruction). It seems that I have fallen in love with you. Codeshwari, although I belong to the poor Intel-x86 family, yet I have many things to oer. Unlike the newer generation, I don't have parallel processing so I will execute you and only you till you halt. I have a sufficient Cache to give shelter to your variables. I also possess a large data bus to cater to your demands from the memory market. I promise to disable all my interrupts so that nobody could interrupt your execution. I will always allow you to POP my stack whenever I will PUSH your data. All in all, I promise to be compatible partner.

I tried convincing your father to get a permission to execute you but he seems a very emotionless person. (I could very well understand this since HE IS A PROGRAMMER AND HAS NO LIFE). Codeshwari, let me run on you. I promise to deliver healthy and efficient KIDS.EXE files.

Thanking you in anticipation.

Yours lovingly,

Mr. Chippo CPU

(Please deliver to the neighboring address if valid bit is null)



Akshay Gulati

### **INTERNSHIP EXPERIENCE**



For the ones looking for an internship packed with adventure, Schlumberger is the right place to be. From the moment you join the gang of fellow eld interns for your summer sojourn, it is a roller coaster ride that shall take you through posh four star comfort during the initiation to the grill and adventure of spending nights at an oil-eld, probably putting up in a high end Schlumberger Truck with computers and fancy gadgetry that shall make you feel like part of a sci- movie. When they come to recruit you, all that Schlumberger looks for in a student is the enthusiasm to learn and the adventurous streak. You get to learn about the oileld industry in the most innovative ways possible. If you cherish meeting new people, then I can assure you that you shall meet some of the coolest engineers you can ever think of. But at the end of the day, when you see a brightly light oil rig standing majestically in the darkness of the night, it makes you take pride in engineering.

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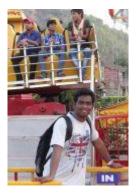


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# Call For Articles And Blogs

We are looking for technical as well as non technical and experience sharing articles from students, alumni, faculty members and industry professionals. Articles pertaining to completed/ongoing projects, views, discussions, topic introductions, applications and professional or educational experiences are most welcome. Articles must be 1500-3000 words in length and should be written keeping in mind the diverse range of targeted audience including people



with little as well as extensive knowledge of electronics/ electrical. Please email us at cepstrum@iitg.ernet.in for any clarifications or suggestions.