

PEACEFUL APPING

Arnab Sinha ¹

"Meeting the deadlines is not good enough, beating the deadlines is my expectation."

Dhirubhai Ambani

1 Introduction

Apping - a popular lingo given to the process of applying to universities abroad (more specifically USA/Europe). This process as observed by many *app*-ers, is time-consuming, complex, tedious and involves commitment of resources like time, money and energy. So before you embark upon the process of apping, *think* a bit. Why do you want to do a MS/PhD? Specially for PhD, unless you have a *rock-solid* reason for doing a PhD you **should not** apply. There is a very good literature available in the internet which might help you in getting this reason [1–3].

My experience showed me, that with certain amount of organization, one can do it with peace of mind and efficient usage of resources. I deliberately used the above quotation not to make it rosy but to give you the essence of organized apping. Excuses will do you less good compared to a planned execution of the duties within the given time-frame.

The primary focus of this article will be to assist students in: *how to remain organized throughout the apping process?*. This article will be primarily targeting future CS students of IIT Kharagpur who can easily associate themselves with the process described. However, I feel students from other institutes and diverse disciplines will also be benefited from the advices due to their fundamental nature. Further, I assume that the reader has access to *internet* and *computer* as well.

By no means, I claim that this article is a complete guide to apping. There are excellent references in the web regarding *getting into a grad schools in US*. I thought it would be inappropriate to repeat their ideas once again. I have cited some of them in appropriate places. Please make it a point to go through the valuable suggestions offered in those articles too (which I have deliberately omitted here).

2 My Own Journey

I had applied for PhD programs in Fall 2007. I observed a few of my seniors and my friends closely since my sophomore undergraduate days, during their struggle in their respective apping

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phases. I got numerous ideas and tips which helped me a lot to maintain my *sanity* throughout the whole time.

My Profile: My profile before applying to Fall 2007 was following. (a) DR (Dept. rank) - 1, IR (Institute Rank) - within top 5, (b) CGPA - 9.28, (c) GRE/TOEFL - 1330 (Quants-800, Essay Writing-5.0)/270 (d) Publication - One international conference publication and three floating.

Challenges: In the Department of Computer Science, unanimously, the most difficult semester is 9th semester. I had 3 dept. electives, German, one design lab project, Masters thesis project and if you are unfortunate as myself you will be entrusted with the duties of two courses' Teaching Assistantships. I am proud to have scored a perfect SGPA that semester and hence I am documenting my experience as "*Peaceful Apping*".

My Applications: I applied some basic *heuristics* (whatever it means) and a bit of technology to manage my busy schedule! My record shows that it worked, and hence I am sharing them with all the future *app*-ers. I had applied to Stanford (CS), UC Berkeley (EECS), UIUC (CS), Princeton (EE), Cornell (ECE), CMU (ECE), Texas Austin (ECE), Univ. of Washington (CSE). I had the following offers.

- (1) *Princeton University*: Gordon Y.S. Wu Fellowship, the highest fellowship offered to their top admits.
- (2) *UIUC*: Open offer, i.e. I can work with any faculty member I wish. Very similar to a fellowship offer.
- (3) *CMU*: Carnegie Institute of Technology Dean's Tuition Fellowship.
- (4) *Cornell University*: Cornell Fellowship
- (5) *Texas Austin*: Microelectronics and Computer Development (MCD) Fellowship

I was rejected by Stanford, Berkeley and Univ. of Washington. Finally I decided to join **Princeton University**.

3 *No-tension Apping Guideline*

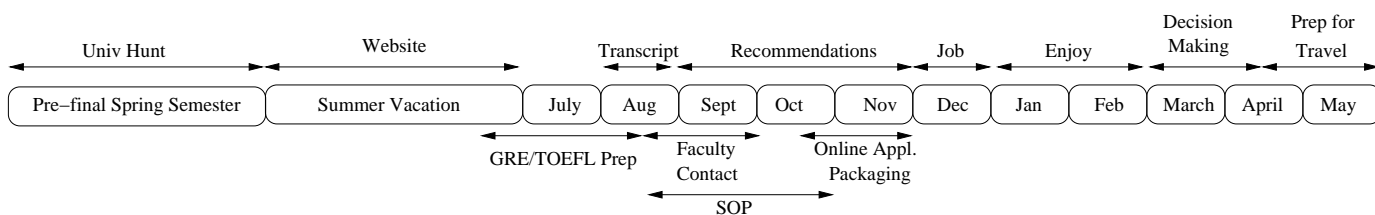


Fig. 1. The suggested time-line, which I followed.

Generally, the top universities have their deadlines for online Fall application submission on **December 15**. Students, who are applying in their final years of college, need to be very much systematic regarding the planning and execution, as they are in the midst of a running semester which they cannot completely ignore. So in this section I will be highlighting on framing the time-line of the process. A nice web-reference regarding this can be found here [4]. However, this time-line is merely an example. Individual should decide his/her own time-line. Note that the phases may be *overlapping* too.

□ **Tips:** Do not make ambitious plans. Make your own short-term as well as long-term plans. Your long-term plan should comprise the month-wise break-ups and the weekly planner should

be a more detailed one. If you have google desktop installed in your machine, use the *scratch pad* present in the desktop (however, you can always make use of some notepad / diary too).

My whole description will evolve around the managing of computer folders and documents along with the other necessary tips. I chose to describe it this way, since I found the appers although well-equipped with tips regarding writing SOPs and taking GRE/TOEFL but they do lack knowledge in the organization part. Figure 2 and table 1 shows the status of my folders after the I heard from all the universities.

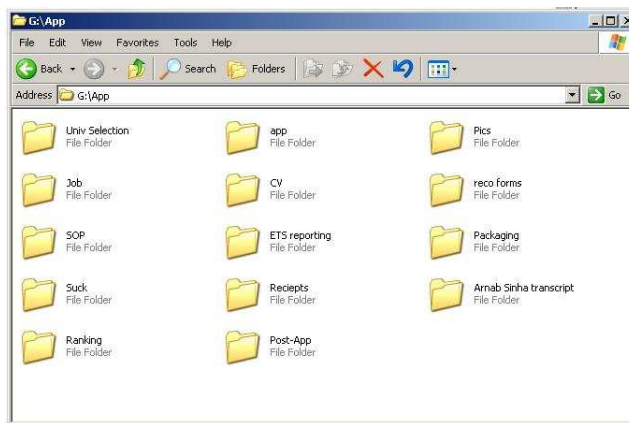


Fig. 2. The App folder, which evolved with time. The various sub-directories are the described in the table 1

Folder	Creation Date	Purpose
Ranking	November 12, 2005	Rankings from usnews.com, phds.org etc
Univ Selection	March 11, 2006	List of faculties, groups of several universities
app	May 03, 2006	Contains apping folders of friends and seniors
CV	August 22, 2006	Resume of myself and previous appers
reco forms	August 27, 2006	Reco-forms of univs
SOP	August 30, 2006	Contains different versions SOPs of myself and appers
ETS Reporting	October 26, 2006	The ETS code lists and my test details
Suck	October 28, 2006	Suck-mail templates and versions
Packaging	October 28, 2006	The cover-letters in the packets
Receipt	October 29, 2006	The saved html files of online payments
Arnab Sinha Transcript	November 08, 2006	Some univ ask for soft-copy of transcript
Post-App	February 25, 2007	Offer-mails, visa

Table 1 : Chronologically arranged sub-folders of App

3.1 Pre-app Planning

The pre-app phase begins usually 1/1.5 years before the targeted Fall. The various components of the planning are described next.

Univ Hunt:[*Spring Semester of Pre-final year*] I started my *univ-hunt* i.e. listing the suitable universities, in Nov/Dec 2005. It is difficult in a sense, one needs to look into the personal

interest, reputation of the univ/group and most importantly estimating the plausible match between the profile and stature of the university. So do the following.

- (1) Make a list of the universities based on the ranking.
- (2) Collect the faculty list (email, web-address, research interest etc).
- (3) Interact with people. Contact seniors, experienced grad students, advisor in the department, go through some of the recent papers (well this actually hints at prior research experience) and finally come up with the rough draft.
 - **Tips:** Make a standard questionnaire comprising of specific queries and then send short mails to the seniors. Allow them sufficient time for the reply. Do not bombard them with your mails.

Website:[*Summer vacation*] Almost all the top universities ask for a website where you are supposed to host your online resume, links to the publications, reports, powerpoint presentations, research interests etc. So build a website (a non-fancy one will do), if not present already as early as possible with the necessary details. In fact, you can always use some standard templates available in googlepages and other free-sites like geocities.com, domaindlx.com etc.

GRE/TOEFL Preparation:[*Mid June-Mid August*] One should take it as early as possible. Schedule the appointment early enough, since there is a tremendous rush in the months of September-December. I took the test in August 17, 2006. There are enough references on how to score high. The possible references are the following:

- (1) Books like Barrons', Big Book etc. Softwares like Kaplan, Powerprep etc. In my opinion Powerprep is the only authentic source since it is issued by ETS only. Moreover, because of its adaptive property, a single test of Powerprep can be taken at least 3 times before one gets to know almost all the sets of questions in it.
- (2) Some public forums like yahoo groups, Testmagic, Princeton Review etc.

Regarding the preparation, I will suggest spend at most 2 months for intensive preparation. Mugging up of words requires skill. Some suggestions like, writing while you are reading, associating some real-life persons/incidents with the special words, multiple revision etc proved beneficial for me. For TOEFL, one may like to watch some English movies and the rest is very easy. Make sure, you take some practice tests before you actually sit for the exam.

□ **Tips:** Regarding the essay, whatever people suggest you, try to write a longer piece with ample examples in it. My experience says - *it works*.

Transcript:[*August*] A smart apper should get his/her transcript issued from the Academic section by the month of August. Next do the following.

- (1) Photocopy around 20-25 copies of it from the main-building xerox center in the first floor. They will charge you @ Rs. 2.5. Make sure that there are no wrinkles in the photocopy.
- (2) Write your roll no. and name with pencil in equal number of the envelopes (~20) and submit them along with the photocopies to the Dean's office. Do it early, otherwise face the rush! The dean usually takes less than 5 working days to sign them.
- (3) Collect the sealed envelopes and keep them safe with you.

□ **Tips:** Some university also ask for the intermediate and high-school records. So make sufficient copies of them and get them attested by some *friendly* faculty in the dept.

Contacting the faculties:[*Just after taking GRE/TOEFL, August-September*] This part often people coin as "*sucking*". Regarding suck-mails, there are various different views. According to some, it is unnecessary. Well, I had sent a few of them. The justification of sending them is as follows.

- (1) I wanted to classify my list of universities into three categories - (a) Dream (b) Feasible (c) Highly Feasible. First, I thought of ensuring the univs in category (c). So from the pool of universities, I started mailing bottom-up according to their rank. When I got my first encouraging reply from some faculty Prof. A in univ C, I set my worst-case lower-bound as C.
- (2) In certain cases, my experiences say that if your profile is good enough, sending such mails might attract the attention of some good faculty, which is in no way detrimental.

□ **Tips:** Some faculty maintain a FAQ page. Go through it first. In fact, I found a CS, Princeton faculty asking the prospective students to mail him with a peculiar addressing, "*Dear Sidney Poitier*" in the last line of the "*Graduate School at Princeton*" html page [5]. He also mentioned, that in the absence of that particular subject, he simply ignores the mails. Do not send these mails in the weekends. The mails get stacked under hundreds of other unread mails. Send them in the weekdays after having your dinner. Usually, that is when the faculties are in their offices. It is likely, that you get a short reply instantaneously. If you do not get a reply within 2-3 days chances are high that the prof ignored you. You may like to send mails to all multiple faculties in the same dept. simultaneously. It is least expected that they chat with each other over your email. Moreover, do not ever attach your resume (many faculties use pine which is a console based mail-application sans GUI) but write in text in the body of the mail. The *mantra* is: remain *crisp* and *brief*. No need to mention your achievements in inter-hall hockey competition !!

3.2 Real Apping Phase

This is the most essential part of the process. Here you will be parallely handling about 8-9 universities on an average. So maintain some table (like fig 3) which should be updated regularly. This table will be giving you the current state of the apping process.

□ **Tips:** Choose suitable colors for highlighting the universities which are (a) requiring immediate attention, (b) all documents ready for final submission (c) online application submitted etc. If possible, always take backups of this table somewhere (e.g. mails, pen-drive, re-writable CD/DVD etc.) I thanked one of my sisters who gifted me one such flash-drive to me. Secure your mail passwords. You may change it at regular intervals. It is not necessary to use your institute email address. If you are comfortable with Gmail, Yahoo, Hotmail it is absolutely alright to use them. I used gmail which helped me in (a) storing in the form of conversations (and not mere emails), and (b) elegant search facilities. Label the conversations with the univ name for your ready reference in future.

SOP: [*August-October*] Statement of Purpose forms a vital component of the application. So one should spend some considerable amount of time on it. There are ample number of SOPs available in the LAN/internet. Get hold of them, else mail to me. Once you get them, read them and try to prepare the first draft from it. Surely, if you read that twice daily for the next couple of weeks, you yourself will find out many loose ends. Modify accordingly. Next send to some friend/relative who have successfully app-ed recently. Be ready to receive some strong criticisms (in a way they do more good). Remain open to ideas. Appers keep several versions of

Name	Program	GRE and TOEFL	Application Fees and deadline	Relevant Websites	Login
UIUC 1931421	Department of Computer Science	GRE: Not Required TOEFL: Reported during Test	12/15/2006, 60 dollars, Ready for submission	https://app.applyyourself.com/?id=uiuc-grad	PIN: R393D9I
Princeton	Department of Electrical Engineering	GRE: Reported during Test TOEFL: 2672 and dept code 01	\$65 (before Dec 1), \$80 (Dec 2- Dec 31) Dec 15, Ready for submission	https://apply.embarc.com/Grad/Princeton/28/ For more funda http://gradschool.princeton.edu/admission/applicants/guide/required/	amabsinha@2itia
UC Berkeley	Computer Science-PhD	GRE: Reported during Test TOEFL: Reported during Test	Application starts from Sept 11, 2006, Online application submitted by December 15, 2006, at 11:59:59 pm, transcripts should arrive by Jan 9, 2007, Fellowship: Dec 15, \$80, Ready for submission (except for the Personal Statement)	https://sis.berkeley.edu/grdappl/grd_login_olduser er 60 days time to fill up the application form and submit	amabs, z

Fig. 3. The status snapshot which also evolved with time.

the SOP. In fact one of my seniors had 7 versions of his SOP. Also you must go through the [1] for nice suggestions.

□ **Tips:** Whatever people may suggest you, from my experience, if you really have very good profile, do not write anything *flabby*, but otherwise no one stops you from writing rosy SOP. Keep it short. In my case, it was less than 1.5 pages in size. Also mention extra-curriculars. Sometimes it works.

Recommendations: [September-November] Regarding the recommendations, contact the faculties early enough. Allow at least two months time to them. There are two ways you can send your recommendations - online (via mail) and offline (via post). Usually, faculties are forgetful. So if you choose to send recommendations online, you need to check back at certain intervals of time whether the recommendation is already submitted. If any particular faculty is delaying beyond a threshold time-limit, remind him by re-sending the mail with the deadline. Sid [6] and Gradschooltalk [1] has something more to offer in this context.

□ **Tips:** While requesting for reco, send a current resume (along with one of your pictures on it). They recognize your face better than your name. Also, in case of paper-reco, fill up all the little details (e.g. tel, fax, email, address etc of the faculty). Otherwise, they may get annoyed. Mention the deadline (not of the univ, but the date you set for yourself for the final dispatch of the packet) too.

Online Application: [November] Nowadays, unlike mentioned in [2], most of the universities prefer online applications. It is easy and fast. You need to create a free-login in those websites. Start filling up well ahead of the deadline. You might be facing little problems regarding the GPA calculation, financial aid form etc. My suggestion is: *do not* takes chances. Mail the graduate coordinators/assistants whose job is actually to assist you in filling up the forms.

□ **Tips:** After you pay your online application fee, usually you find a html page confirming the transaction. Save that page in your "receipt" folder. This is for your record only. Also save the

generated automatically pdf after the completion of the application. You may mail the faculties (who expressed sincere interest in you), that you have already submitted the online application form.



Fig. 4. One of the packets that I sent to my friend in Princeton University.

Packaging: [last fortnight of November] Before sealing (see Fig 4) make sure all the documents are inside. I put all the separate documents in single small envelopes with all details (at least mention your name in reverse order e.g. Sinha Arnab and the online application ID on each envelop). Also you can send a cover letter containing the list of all the stuffs you have put inside. Send photocopies of GRE/TOEFL (even if they do not ask for it) and the print-out of the online-payment receipt in the packet. Send your packets allowing at least 2 weeks of time before the deadline. You can send them via TNT courier service available from Swaraj Travels. If you sending your packet to any university, they have a discount rate of Rs. 850, otherwise they charge around Rs. 1850. They will give you a *consignment tracking number* which will enable you to track the present location of your consignment in www.tnt.com. Do not try to send anything else other than paper documents (e.g. chocolate for your dear sister in US who will post the packet for you). But nobody stops you from writing her a small letter! From some source, I heard that fellowships are usually granted to early applications. This sounds illogical but I believe appears who send them early are generally more serious and less likely to omit any document, as compared to their friends who hastily submit their application in the eleventh-hour !!

□ **Tip:** Do not ever send your packet before submitting your online application. Sometimes, some universities generate something which needs to be printed, signed and returned to the univ along with the packet. Moreover, you can save a lot (more than Rs. 3-4K), if you send all the applications to your relative/friend/senior in USA you trust, who will distribute the packets for you, at a cheaper cost obviously.

3.3 Wrapping up

This is the last phase of the journey. But this is also very vital for a successful complete apping process. This phase usually begins in January. You are done with all your applications, sending packets and moreover, you are already *placed*. In fact, now you want to have (in fact you deserve) some fun with your fellows. However, for a certain section of students this is also high-time for dilemmas and despairs. Let's see what we can do about it.

Play Hard: [*January-Mid February*] This is the most peaceful period of an app-er's life. Enjoy the last winter in the campus. Plan some small tours in and around your institute. Spring is in the air. So enjoy the fests and have a gala fun. Remember, this is the best period of your life and you are spending the last elysian semester in IIT.

□ **Tips:** For people in dilemma, whether to join the lucrative job in India, or to go for higher studies, just chill! Wait for the apping outcomes and don't allow anything else to ruin your wonderful time. Believe me, scenarios change once you get fabulous offers from the universities.

Decision-Making: [*Mid February-Mid April*] One fine morning, you open your mailbox and find, " *Your Princeton* <you may like to replace it> *Admission*" and the celebration starts in your wing. The season of treats follow in the next couple of weeks. But then you will be receiving mails from various faculty members (if you are among the **most-wanted** admits of that university). They usually ask for some suitable time when they can call you. Some suggestions regarding that:

- (1) Mention some land-line number (e.g. tel in your lab), as the US calls sometimes get garbled up if you choose to receive in the cells.
- (2) Check the local time of your institution and the university from [7].
- (3) Allow a time-slot of around 2-3 hours. Present yourself 30 mins earlier in the location with all the documents open in front of you. It is likely that he/she has your application in front of him/her.
- (4) Stay cool. They never ask you difficult problems. They will be asking you about your interests, highlighting about their own research activities. You should do a little homework before you sit for the call. Go through the website of the faculty member and if you have anything to ask, don't feel shy to ask about it. Remember, it will be mutually beneficial to both of you.
- (5) If you have multiple offers, let them know about it. See what are his/her offering to attract/convince you. In most cases, you come to know about the contrasts about the individual places.
- (6) Better not commit. Take your time to make the decision.

The next steps are following. Wait to hear from the universities with patience. Do not panic until mid-March. Some lucky fellows get their offers starting in February, but the majority get their offers in March-April. Generally, if you are eligible for fellowships, your admission offers reach you earlier. However, once you get your offer letters/mails, contact the seniors in that univ (just google and find out). It is not necessary that you know him personally. Get to know about the place, department and potential supervisor. Now the next obvious question is, *how do I decide?* I admit that this is a difficult question. Do not merely go by the ranking, which may be misleading. If two universities are within a rank-difference of 5, consider other factors also. Well, in my case, I set my own priority metrics. They were the following.

- (1) Field/Project - This is very important.

- (2) Potential Supervisor
- (3) Fellowship
- (4) Geographical Location.

Mail people who are associated with the universities directly/indirectly. Talk to senior/relatives who are in industry/academic institutions. This is necessary since, you should have the high-level opinion regarding any univ from experts with varying biases. However, do not talk to lot of people. You might get more confused. Nevertheless, in the end take your own decision.

□ **Tips:** You may also like to know about the group culture where you intend to join. In this regard I got an excellent mail from one of my seniors. I present the snippet here.

”Take a look at the professor’s website. Take a look at the number of Ph.D students graduated. This gives you an idea about how proactive the professor is. Take a look at the number of students who have joined universities. This gives you an idea of the depth of research work. Take a look at the number of awards. This gives you an idea of how good the work is. Take a look at the amount of funding. This gives you an idea about the monetary situation in the group. Take a look at the ethnic mix of the students. If there are just Chinese students, then you should excuse yourself. If there are no Indians/Chinese, then the professor is a racist. Ask other students about the nature of the professor. You don’t want to go to a guy who is mean, unreasonable, dumb and has no time for his students.”

For further suggestions, consult the last part of [1].

Travel Preparation: [*April-till you reach your grad-school*] This is the last phase of the process. You have toiled hard to come to this day with flying colors. Two things you should plan to learn during this time, (1) driving, and, (2) cooking. Check out if the university arranges for housing and food. Well, I think, I will write this part later once I experience this phase myself. But make sure, you have fun with your kins in those last holidays in the country.

All the Best !!!

4 Acknowledgements

I would like to thank some of my friends and seniors who helped me a lot during the tedious app-days.

My mom: Without her support, I couldn’t have made it. Her encouragement and mature suggestions/advice always showed me the pathway and added new items in my ”to do” list!

Aroop Sircar [Biotech Dude 2004, IIT Kharagpur, Johns Hopkins University]: Aroopda, as I use to call him fondly was my hall senior who was the first person to inspire me to adopt a planned approach towards apping. I was in my 2nd year then when I met him. He also helped me with the credit card that I needed for paying the online fees.

Shambaditya Saha [President of India Gold Medalist, Biotech 2006, IIT Kharagpur, Yale University]: Shamba, my best friend from RKM Narendrapur days, is one of those persons, I strive to become. The most balanced person with excellent discipline and quantitative decision-making skills. I really missed him during my 5th year. However, he was always an email’s distance away from me, waiting to reply any silly app-query.

Devasmita Chakraverty [Calcutta University, University of Washington]: She is my cousin and one of the closest buddies, who helped me throughout my apping process starting from lending the Barrons', checking my evolving versions of SOP (with constructive criticisms), distributing my packets from mainland of USA and sharing experiences regarding travel and visa.

Chintan Thakkar [ECE Dude 2007, IIT Kharagpur, UC Berkeley]: He was my counselor during the wrap up phase, whose couple of US summer internship experiences came handy for me in the visa processing and resolving some critical dilemmas.

Apart from those special mentions I was immensely helped by *Anupam Chattopadhyay* (RWTH Aachen, my internship mentor), *Arnab Roy* (CS 2004, Stanford University), *Siddharth Seth* (ECE 2006, Stanford University), *Avik Sarkar* (my next wingie in B-202, Patel, Mech 2006, Purdue University), *Formal-V* (IIT Kharagpur) group members for their suggestions, *Niket Agarwal* (CS 2006, Princeton University) my thesis advisor *Dr. Pallab Dasgupta* and other faculties like *Prof. P.P. Chakrabarti*, *Dr. Dipanwita Roychoudhury*, *Prof. Indranil Sengupta* (my recomenders from the institute) and *Prof. Rainer Leupers* from RWTH, Aachen, Germany (my out-of-institute recommender). Apart from them, there are galore of friends/seniors/faculties who helped me during my "Peaceful Apping" days.

References

- [1] Mor Harchol-Balter. Applying to Ph.D. programs in Computer Science
www.cs.cmu.edu/~harchol/gradschooltalk.pdf. Carnegie Mellon University, 2004.
- [2] Dr. Romit Roy Choudhury. On applying to Graduate School (MS/PhD) in US universities
http://www.crhc.uiuc.edu/~croy/GRE.html. Duke University.
- [3] Dr. Sanjit Seshia. Advice for Researchers and Students
http://pag.csail.mit.edu/~mernst/advice/. University of California, Berkeley.
- [4] The Princeton Review. Getting into Grad School: A Step-by-Step Application Timeline
http://www.princetonreview.com/grad/apply/articles/process/schedule.asp.
- [5] Prof. Vivek Pai. Graduate School at Princeton
http://www.cs.princeton.edu/~vivek/gradapp.html. Princeton University.
- [6] Siddharth Seth. Apping!!
http://www.stanford.edu/~sidseth/apping.html. Stanford University, ECE 2006, IIT Kharagpur alumni.
- [7] Time and Date
http://www.timeanddate.com/.