Introduction to Computer Architecture

Assignment 2

Question 11 Compilation

To Every One Of A Kind,

Wherever You Go, There You Are

I hope you really enjoyed the class (at least for some moments) so far. You decided to study Computer Architecture with me among several instructors. I truly appreciate your trust and support. Ever since we met, I keep working on how to provide you with a satisfactory learning experience in return.

For almost all previous editions of this course, an assignment question sought to solicit thoughts and suggestions from the participants. For example, do you gradually understand strategies or things from different perspectives and weight their tradeoffs? What do you think is the real challenge for you to learn this course? Do you consider interactions in class helpful? What held you back when you were trying to ask or answer questions in class? What suggestions (for better learning this course) would you like to provide to other students? What help or assistance would like from me or other students? All their thoughtful and constructive feedback has encouraged us toward a more rewarding computer architecture class.

This time, I would like you to introspect beyond this course. Taking a course should be rewarding in many possible ways. As we discussed in the first lecture session, even if you may barely practice computer architecture principles after the class ends, if whatever you learn through this class---whether it be computer architecture per se, a philosophy it implies, a study tip or inspirational quote we share, or a new friend you know---keeps driving you toward your greater self, this course fulfills its mission.

In particular, you are highly expected to develop a clear vision and be determined to strive for it. Most students in the computer architecture class are junior. The third year cannot be more important to decide your future. If you aim to work in an IT company after graduation, start practicing skills that help you ace the interview. If you plan to pursue a higher degree, join a research lab to cultivate research experience and application materials. If you have not decided, do both if your time and energy permit, see which one you really prefer. Try to make your decision based on your own goal and experience. Work with people who keep your interest and passion alive. In return, be part of the initiative that motivates yourself and people around you.

"See the world not as it is, but as it should be."

??With this question, I would like you to share your thoughts on your goal and plan.

For example, what is your goal after graduation? What is your plan to achieve that goal and what challenges might be involved? How do you manage to be motivated and determined? What helpful advices or suggestions did you get from senior students and professors? What suggestions would you like to offer peers with similar goals?

"Where are you? Here.
  What time is it? Now.
  What are you? This moment."

After my graduation, I want to continue my research on one area that I truly feel interested in, maybe AI or data analytics. And my position may be a researcher in one lab, a teacher in one university or a employee in one company's lab. Actually I'm not sure about my future and I can't be sure, but I don't want to just work as a programmer for a company and live without dream and vigor.

To achieve this plan, I must study further as a master and finally as a PhD. It's not easy to do so and I will meet many obstacles. For example, the difficulty in the research and the difficulty to be accepted in one university to continue my study both exist.

To overcome these difficulties, I need a chance to be accepted to a higher stage. So I did some research work in the past years and will join a exchange program to National University of Singapore to learn more and get more experience. To keep myself energetic and motivated, I think the scare to a plain future can be one way. I have to suffer these matters to go further. As for advice, I think from professors and senior students, I get many suggestions about time planning and scientific writing, besides the professional knowledge. As for my advice, I think it will be keep your eyes open, find more chances that you can catch and devote yourself to them. We are all intelligent and hard-working, and maybe the most worthy thing is chance and horizon instead.

Above are some of my thoughts. And thanks for kg's effort and consideration for us students both on study and self-development.

For the goal after graduation, I now hold the view that I will go abroad to get higher level education in foreign school, but this is just to live up to my parents' requirement. Since both my parents have gained a relatively high degree in academic and they hope and require me to get the similar achievement too.

However, for my personal view, I feel somehow confused and I do not know what to do after graduation. Sometimes I prefer a gap year because this provides me time to think about what I really like and what I really want to do or to be in the future. Maybe I will run a small studio to offer extra practice(代练工作室) in LOL and 阴阳师 (a game of Netease). Using what I learn in university, it is possible for me to make the mechanical operation more Intelligently. (This part is only my personal view and there is little possibility for me to do like this.)

To achieve it, maybe money is the biggest challenge since the technique we use is not so demanding. Therefore, I need to earn money when I studying abroad, not only covering my daily expense but also to save money to realize my dream. A job is a necessity to calm my parents and it is also the fundamental basis to survive. It seems ridiculous but it does make sense for me.

What motivate me to have such a idea? It is mainly because I want to be myself and I do not want to feed on my parent though they play an important role in the past few years of my life. They taught me to keep thinking, thinking about what I really want to be in the future. Maybe being a teacher in the university is the correct answer for them and in order to achieve it I need to study for a long time. It is a good answer for them but not a excel choice for me. I want to live on my own and live my own life!

This article is messy to some degree and I thanks you a lot to have time reading it.

Thanks for reading!

Actually I spent quite a long time thinking about this question this summer vacation. That was a period of time I doubted myself and always got into bad mood. I didn't know which way was the best one to choose and I don't either now. I was doing an internship and the same time preparing for my IELTS test.

I'm not the kind of people who can determinedly know what kind of people they want to be just after a 4-year-period in university. I just can answer the question ''what kind of people I don't want to be''. I don't want to be a backend or frontend engineer, which will make my too dull; I don't want to be a person who just focuses on money or salary; I want to do something that can really benefit others with my knowledge, which can give me a kind of accomplishment; I don't want to do the work has none relation with my major. But that is all. These thoughts can help eliminate some choices but can't help make a specific choice.

However, I come to this cross road and I have to choose a direction for further development. It seems like a powerful hand is pushing you, you can't step back

because of the expectation for yourself: You want to be someone, not anyone; You want to be different, even I don't know what the "someone" is like.

This semester I'm looking for a job first, as well as preparing for the application for a master degree. Finding job is really tiring. You hand in your resume to tens of companies then you get 7~8 interview, then 2~3 of them come to the final interview. Up till now,I finish all of the interview process of Huawei and QuLian Technology but both of them don't think I am the most appropriate one. They don't tell you you are not appropriate but the states for my application are "to be confirmed". The world is so large, what is the most proper place for you?

I don't know the answer and I don't know when it will come. This is really confusing and afflictive----you are waiting someone to choose you, you don't know when it will come, especially you are in a large cross road in your life.

This is a process to be continued, even can last to 2020. I don't know the answer so I have to keep finding.

The sense of uncertainty can't be more realistic to me. I cried last week because of this long-term process.

I still have my plan and preference. I want to learn about data science in the future, maybe if the opportunity comes I will pursue a Phd degree. I want to make some exact contribution--you can make wise strategy、 useful research by analysing data. This is practical; Or as a pretty girl who has a good communication ability I will choose to be a product manager--using my knowledge to make cool and charming products; Or in the future I may feel tired and become realistic then I choose to turn to another career which is considered to be more suitable for girls such as finance or law.

Anyway, I think the most important thing is: I really want to be someone different; Keep on going and trying and hold all the good qualities such as working hard you should hold. I believe it will come sometime.

Besides, I greatly appreciate all the people who have helped me or gave me suggestions (including dear kg~hahahha).

Wish our kg happy everyday! O(∩_∩)O

My goal : become a postgraduate of ZJU by taking part in the postgraduate entrance exam.

Plan: I have been reviewed for a year, everyday I set aside more than 10 hours for this purpose.

Motivation: The pressure from my parents and my interest of research have become my main motivation.

Advice from senior students :

1. Hard working is important, but health is of greater significance,so we must have ample sleep everyday during review.
2. Physical exercise is important to   improve our review efficiency.
3. The devil is in the details.

My suggestion: whatever success or defeat,never afraid or retreat during this process,give every ounce of effort and do not regret.

11. My ~~plan~~ goal: Undertake postgraduate study. If I'm lucky enough, I will succeed in postgraduate recommandation, or I will try to take part in the entrance exam.
How to achieve the goal? The most important thing is to get good grades in the third year. Then I will try my best to do srtp and leave a good impression to my ~~teache~~ instructor. So, I will have the chance to enter his lab in next term. I'll also try to find an internship at the start of next year.

I deem myself as an atypical CS student, since I'm not so enthusiastic at programming as, at least, the majority of my peers. During the passing days learning as a CS student, I can't really say I've found my ultimate direction, but I've indeed excluded some - working as an software developer, or a system engineer who keeps dealing with problems rising from low-level will never be a decent job for me. Instead, I will, at least in the short run, strive for making the world a better place by applying my knowledge to some society-related regions, trying to come up with some new ideas to make the social media better, make our city better, and make our relationships better. That's why I'm determined to pursue a master's degree on computational social science.

To achieve this goal, I've been in a research group working on social network related topic, learning algorithms and methodologies on graph analysis and data mining. In the long run, I may make some attempts to find a internship in companies with similar ideology in that direction, and finally work on some specific projects to truly do something for the society.

I wanna be a normal programmer in a company that I like.Maybe it is not a huge company, but I do hope I can work for what I enjoy.Maybe the salary is not very high, but I would like to grow with it.

The chanllenge is that I am not famlar with the actual working environment,so I consult many friend or senior students, even some skilled programmer.However,I think I need more project to promote my skill,so I started so many project design in github, but I can hardly take time out to finish them.That really troubles me. What is I really like to do? The lab or my project?Maybe I will still choose the lab.

what I regret is that I pay so many time to manage my friendship.I meet so many people in zju. However,those huge friendship net cost my almost all time to maintain. So I even need to finish this work now,the midnight of 11.25. If I choose again, maybe I will not develop so many friends. Maybe I will pay more time on study.

What's more ,I do hope teachers can assign some homework related with knowledge every class.And homework can offer some tip that may used in the solution of problem.
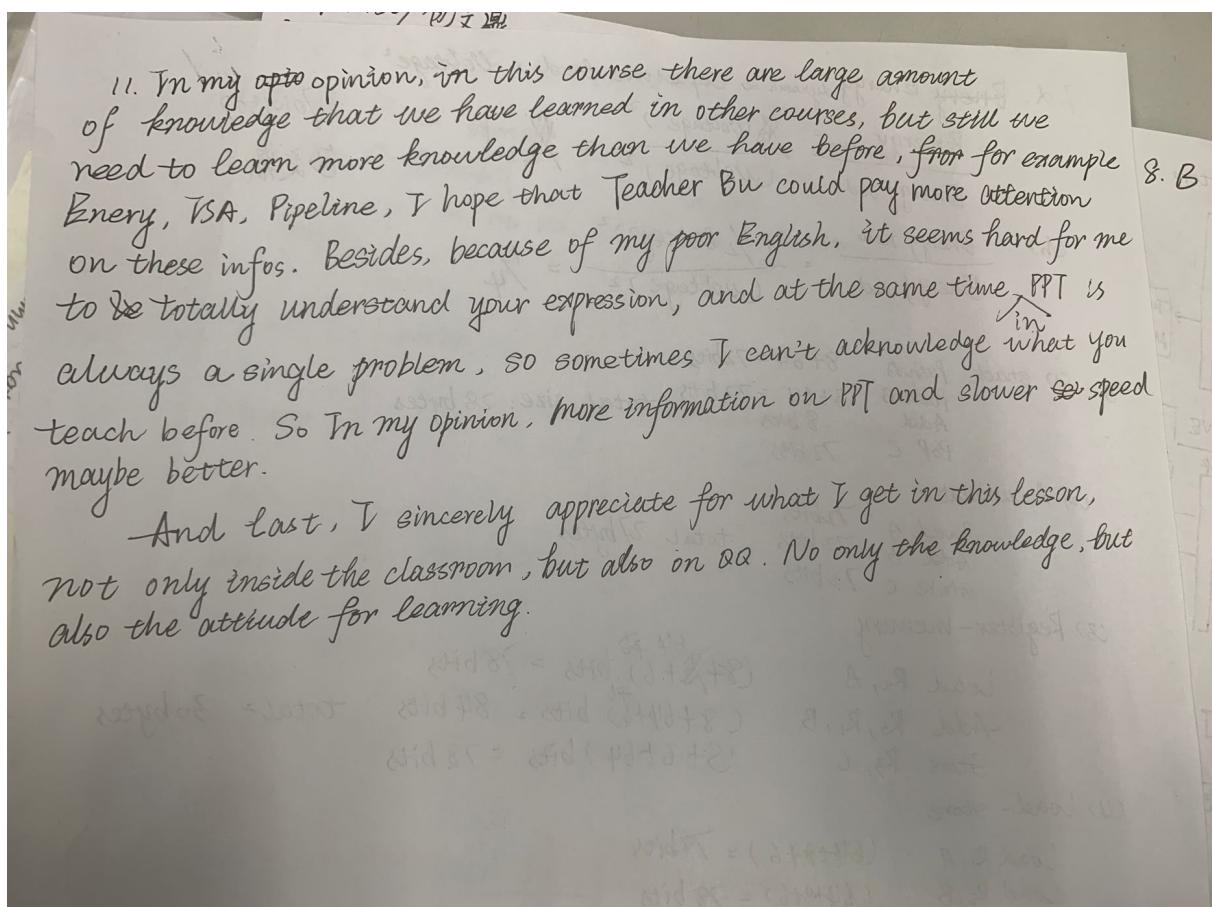
I know I am normal.Sometimes I even cann't follow the class's topic, but I am still willing to learn the CA knowledge, and I will try my besr to promote my English and never miss any class again.

Wish you more and more handsome.Let's come on together!
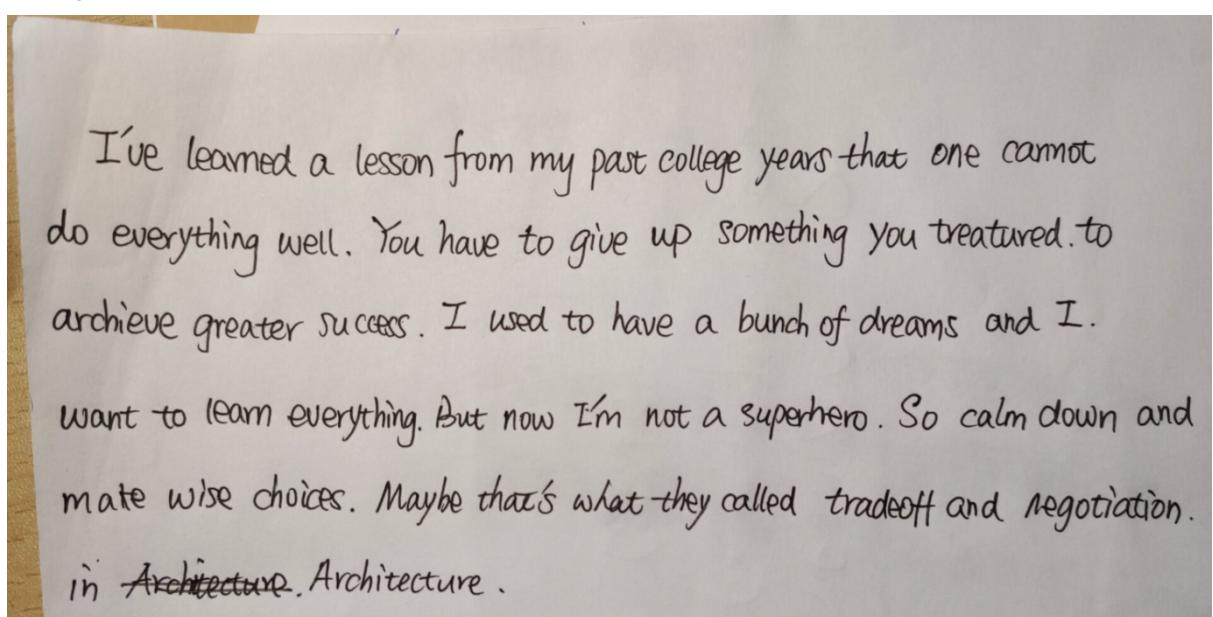
我希望本课程能专注于知识的传授，讨论与交流应首先建立在讲解知识之上，而不是代替有条理、系统而综合的讲解；同样地，我希望对于思想等的学习也应该在课程内容完成之后。

我对未来没有计划，有目前希望在完成功课之条有机会复习本课程，想提高成绩以在未来有更多选择。

11. In my ~~opto~~ opinion, in this course there are large amount of knowledge that we have learned in other courses, but still we need to learn more knowledge than we have before, ~~fror~~ for example Enery, TSA, Pipeline, I hope that Teacher Bu could pay more attention on these infos. Besides, because of my poor English, it seems hard for me to ~~be~~ totally understand your expression, and at the same time, PPT is always a single problem, so sometimes I can't acknowledge in what you teach before. So In my opinion, more information on PPT and slower ~~se~~ speed maybe better.

And last, I sincerely appreciate for what I get in this lesson, not only inside the classroom, but also on QQ. No only the knowledge, but also the attitude for learning.

8. B

I've learned a lesson from my past college years that one cannot do everything well. You have to give up something you treasured. to archieve greater success. I used to have a bunch of dreams and I. want to learn everything. But now I'm not a superhero. So calm down and mate wise choices. Maybe that's what they called tradeoff and negotiation. in ~~Architecture~~. Architecture.

My overall goal is to participate the research of program analysis.

To achieve this goal, a master degree is necessary. So I would like to be a postgraduate student in the near future. My plan is to keep or improve my GPA in the third year, and try to join a lab in this field. (Actually I'm pretty interested in Dr. Wenbo Shen's research, hope I could join his group after my current project is done.)

I could offer some (maybe immature) suggestions for peers. You may find someone (peers) success in something easily, e.g. finding a good job or enter a good school. Don't be too anxious and in self-doubt for that. They may also face lots of difficulties, which is invisible to you. Get useful information from them, and some success could be reproducible.

My goal can't be said very clearly, but it seems that I am under more pressure to find a job after graduation. The knowledge I have learned in the four years of undergraduate and the few practical experiences may make me have a competitive advantage in society, but I think Postgraduate study is a better choice. More and more students choose to stay in school to continue their studies. Some of them really love academic research, some want to get a higher diploma, and some think that the postgraduate period is a buffer period from school to society. My idea is to belong. this kind. My goal is to take a postgraduate entrance examination. I know that the postgraduate entrance examination means that thousands of troops have passed through the wooden bridge. This is a great test for both psychological and physical. In addition to brushing the questions, there are still many choices, such as giving up the autumn trick or Internship opportunities. I hope that through the postgraduate study, I can improve my academic knowledge. At the same time, I can use the platform of the tutor to get in touch with the society. At the same time, I can learn about employment through the postgraduate and the teacher. I think this is an important stage in learning knowledge and making connections.

Some advice: I hope that KG had better speed up some parts of the teaching contents that we have learned in computer organization like MCPU, MIPS and cache and spend more time on new contents like pipeline.

Why I do not like answering the question: I am not good at English, especially Spoken English and listening. (The listening part of my English proficiency test has failed.....) So I often do not understand the question. Even sometimes I know the answer, I may not know how to convey it.

First of all, I really enjoy this course in all aspects. Thanks to this class, I not only learn the knowledge, but also gradually understand strategies or things from different perspective and weight their trade offs. The teacher not only gives us guidance from the knowledge level, but also from personal learning and development. I think the experimental learning is the real challenge. Because it lacks relevant learning materials and PPT (not particularly clear), it is difficult to learn by myself. I think interactions in class is helpful but if it can take less time then it will be better. For me, the lack of fluent oral English is my obstacle to answer questions. I would suggest that they should do more pre-study so that they can better absorb class knowledge in the class. I think we need daily homework to consolidate knowledge.

When it comes to my plan, I want to pursue a higher degree. I will join a research lab to cultivate research experience and application materials. But the problem is that the research direction I am interested in has not yet been decided. I will try my best to get the opportunity to go to the research lab and get in touch with different fields. My class teacher talked to me and gave me a lot of advice.

"You can beat me, but never break me. I stand on my feet and follow my dream."

We'll Carry On! Thank you, my teacher!

Goal & Plan

Since I started my education journey at Zhejiang University, I have gained clarity regarding to my goal, which is to pursue further education abroad. My research interest lies in Computer Vision and Robotics. My short-term goal is to become a researcher of cutting-edge technologies in the field of Computer Vision and Robotics. Over the long run, I envision myself become a professor pioneering innovative Computer Vision and Robotics technologies to handle real-life problems.
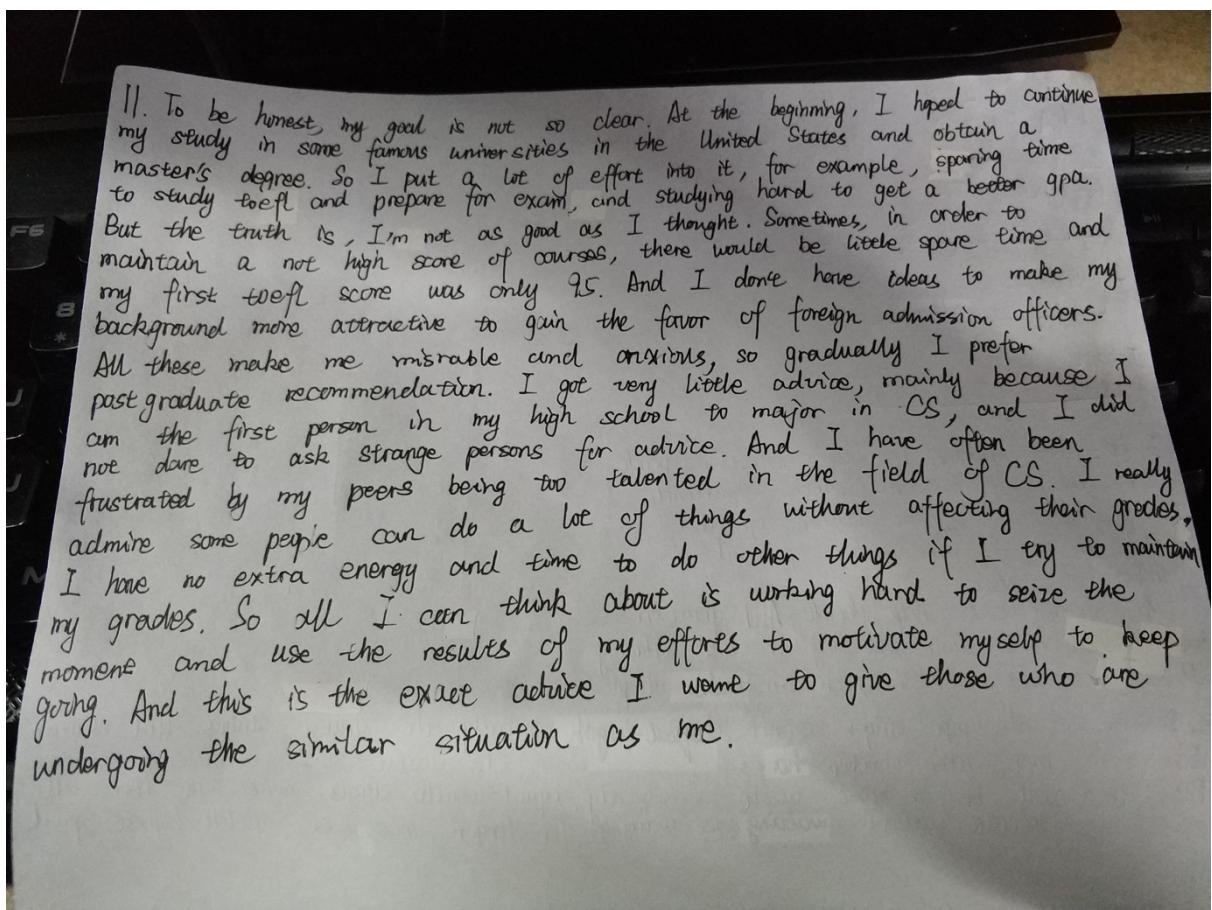
To achieve my goal, I consulted with many alumni to get some insightful suggestions. Studying abroad requires GPA, scientific research, recommendation letter, English, etc. I rank   in my major and have already submitted a paper to CVPR (Conference on Computer Vision and Pattern Recognition), but merely a 4th author. It's really hard to keep all the above qualities to be good. In order to submitted a paper as a 1st author, I'm currently conducting two research projects and they're really time consuming. I have to stay up to 2 a.m. to finish my task, but I still find it difficult to balance curricular performance and scientific research. Moreover, I will take TOEFL test at the beginning of December, I cannot squeeze out enough time to prepare for it.

Although I'm confronted with so many problems, I'm still determined. You have to really push yourself to do as many things as possible to reach your goal. As for the

advice for peers? I think I'm still far from qualified to give others suggestions. There's still a long way to go. The only thing I can say is keep going. As is known to me, students of other universities have already done lots of things. It's never too late to work hard to keep up with them.

Ultimately, many thanks to Teacher Bu's fantastic lecture, I can reap a lot from your guidance. But many apologies for failing to review the lessons every week, which is my studying method in sophomore year. I promise I will review this course very meticulously and hope to have a happy and impressive collaborating experience with Teacher Bu! P.S. I want to take the Network Security course next semester and hope I'm lucky enough to enroll in it😊

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11. To be honest, my goal is not so clear. At the beginning, I hoped to continue my study in some famous universities in the United States and obtain a master's degree. So I put a lot of effort into it, for example, sparing time to study toefl and prepare for exam, and studying hard to get a better gpa. But the truth is, I'm not as good as I thought. Sometimes, in order to maintain a not high score of courses, there would be little spare time and my first toefl score was only 95. And I don't have ideas to make my background more attractive to gain the favor of foreign admission officers. All these make me misrable and anxious, so gradually I prefer past graduate recommendation. I got very little advice, mainly because I am the first person in my high school to major in CS, and I did not dare to ask strange persons for advice. And I have often been frustrated by my peers being too talented in the field of CS. I really admire some pepie can do a lot of things without affecting their grades, I have no extra energy and time to do other things if I try to maintain my grades. So all I can think about is working hard to seize the moment and use the results of my effores to motivate myself to keep going. And this is the exact advice I wome to give those who are undergoing the similar situation as me.

11.　我想毕业以后进入游戏行业（暂定？），不过并没有一个很明确的目标，有想要去的公司，但是感觉自己太菜了，毕业直接找工作会找不到，于是就想着能不能保研（在线上挣扎）感觉努力一下还是可以的。所以现在为了保研努力。没有收到过什么好的建议（惨 我 惨）也没有什么好的建议给其他人（其他人都比我强），硬要说的话那就是不要选计科。

What's my goal after graduation? I asked myself for many times in my college life. Since I major in Computer Science, I think I should work in a professional counterpart enterprise. I will work hard and learn hard to improve myself continually. To achieve this goal in the future, the most pressing things I should do is to study professional knowledge more seriously. What's more, learning to interact with people is important in my opinion, which is something I need to improve. However, I feel confused sometimes, since my academic performance is not very ideal and I'm not quite good at communicating with others. In order to find a way to solve my problem, I used to consult with a Senior Student. He told me not to worry too much about what will happen tomorrow, just relax to do what I really love to do. Only when I truly love my major can I take a great interest in study, as well as working in related enterprise in the future. I think this has a great influence on me. Finally, I would like to share this suggestion with all my peers that whatever you do, love it with your heart.

From the preivious course, I can feel the enthusiasm of kg. As for the goal of myself, I am determined to go further in the path to research. For right now, I am interested in the reinforcement learning problems. What I am going to prepare for this goal, I need to enhance my knowledge in computer thoery and math. I haven't get much advice from senior, but I get motivation from a Phd student in stanford.

I have joined the CAD lab right now to involve in sloving some problem in the image segment classification. However, I cannot get satisfied output right now, and this semster seems to be too busy. After this semster, I also need to make preparation for the application next year.

Try to work hard as much as possible, and the next decision will be made after this year according to the situation. I hope to get a good result in the research aspect like papers.

That's all my goal and preparation right now.

Actually, I have never had a goal and let nature take its course, just take attention to this moment and ignore what will happen in future. It may be wrong, but I want to follow my mind. By the way, my suggestion is when you meet the bottleneck, try to relax.

毫无疑问,kg是计算机学院里面我见过的寥寥几位对教学饱含热情的老师之一,在我上过的课里面,计算机学院,或者说全校大部分老师都只是怀着一种应付教学任务的态度,而kg热情,幽默,希望和学生密切互动,形成一种融洽,高效率的氛围,这种教学风格和态度,我见过的只有wk,sqs,jxh,zgc,sjl,trk等少数几位老师可以媲美.kg尽心尽力希望帮助我们,特别是学期初的补选,相信kg也是费了一番功夫才把超过教室余量补选进如此之多的人, 我当时都做好没选上延毕的准备了结果选上了您的课程,

但是同时也确凿无疑的是,kg遭到了背叛,在过去半学期的课程实践里面,特别是,kg很失望,kg是一个非常nice的人,热情,好说话,对任务布置也非常宽松,希望与同学们形成一种亦师亦友的关系.但是得到的回复却是沉寂,冷漠和藐视规则尽情拖延任务, 私下群聊里面不少同学都怀着一种划水的态度想混过体系课程.

读到Q11时候我非常羞愧和痛苦, 毫无疑问,我在这里面也扮演着一个很不光彩的角色,我同样是利用kg的善意漠视规则的一员,随意旷课,没有对体系投入太多精力,拖延ddl, 甚至洋洋得意,我非常清楚这是一件很过分的事情, 让您深深地伤了心, 但是如果让我试图解释的话,上半个学期我处于一个很不好的状态中...队友第一周就声明他不写代码,对未来的迷茫,特别是家庭纠纷让我很多个晚上都和某几位家人争吵到精疲力竭,独自淋浴好几个小时热水来掩盖哭声试图让自己平静下来...不过现在已经初步调整过来了(大概.

无可辩白的,这些都不是我这么伤害您的理由,我意识到这些都是我的过错,错过您的授课让我课后不得不花费很多时间去弥补课业,阅读ppt和教材来建立知识网络,实验也让我有些棘手, 后面这半个学期我想认真跟上您的教学, 积极参与课程活动, 希望可以弥补上半个学期的错误.

提到课程建议的话,

首先, 现在这个情况真的不是您的原因, 您是一个非常非常好的老师...只是您可能过于高估了我们的自觉性,对于大部分人来说, 我觉得kg建立一个硬性的制度或许更好,每周一次纸质作业(电子稿容易造成大规模抄袭,或者电子扫描件也可以接受), 第二周公布答案,还有就是频繁quiz,这样可以督促我们每节课后都复习内容准备quiz, 如果建立了这样一种预期, 就会习惯性地课后复习, 建立一个良好的知识网络, 而不是真的大quiz来了,熬夜复习一晚上,然后考后就忘光了, 每次quiz 5min左右, 也不会很占用时间.

其次就是,我觉得您在某些部分可能讲的过于慢了一点?比如pipe,特别是开头几周,都在重复组成内容,您可能是顾虑有同学没有学过组成,但是班上我觉得应该基本上不存在这种同学?我们几个外专业的据我所知都是学过数逻和组成的,敢选这个课的同学应该也都是提前有把握的...这样可以节省很多时间讲解重点内容.

非常庆幸可以选上您的课程,希望后半个学期可以不负您的期望,圆满结束课程.
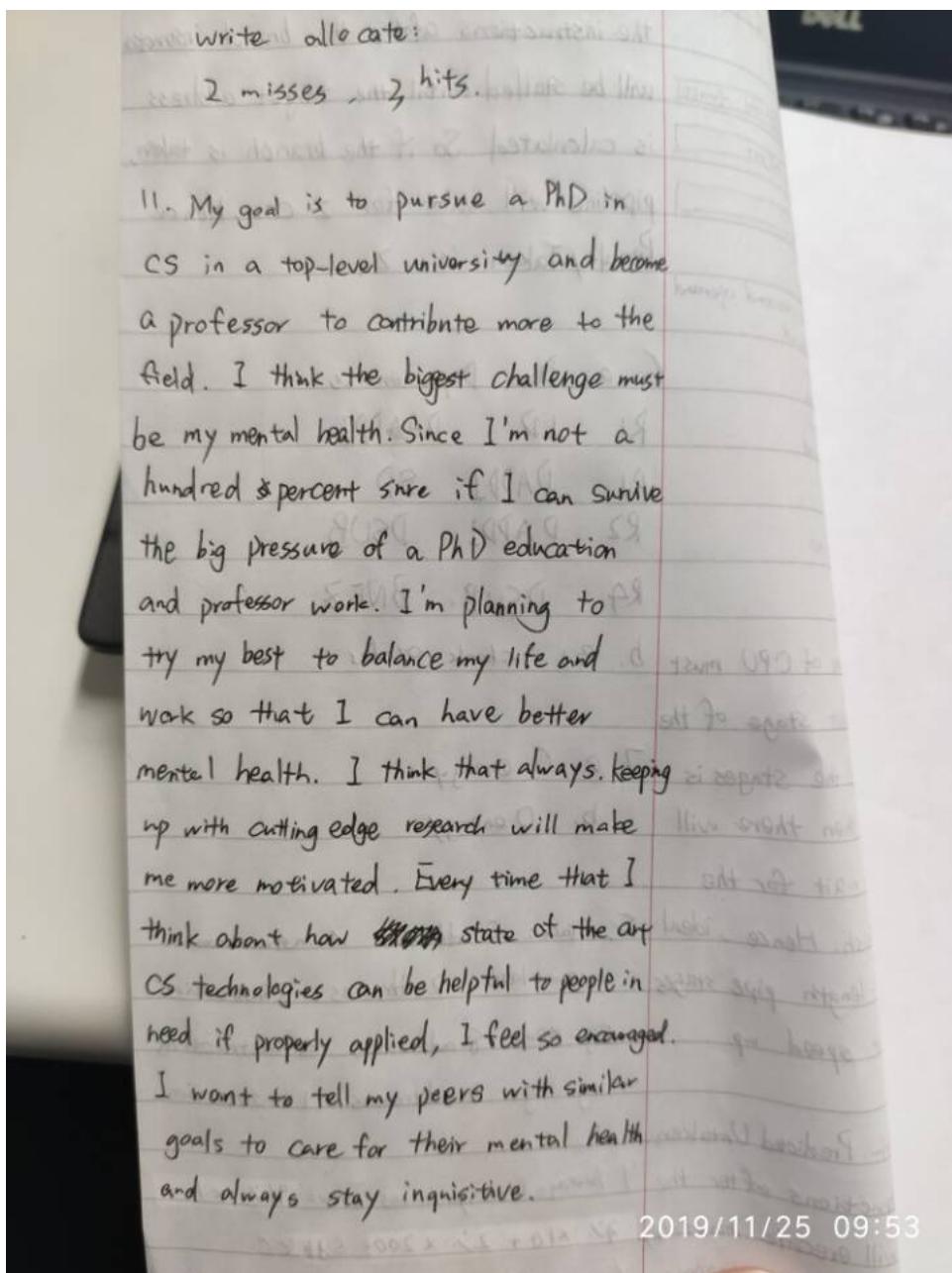
Hi kg:

This is something I want to say in q11:

Some thoughts: The reason why I's not so willing to answer questions in class is that I'm too shy and afraid of making mistakes in front of the public, which makes me feel extremely ashamed.

Some suggestions: The progress of the class is too slow. In fact, many contents in the CA course have been learnt in the Computer Organization course last semester, such as MCPU, MIPS instructions, cache, etc., which can be passed quickly in CA. I think kg can learn about what we have learned in Computer Organization, and skip the duplicate contents in class. In this way we can speed up the progress.

write allocate:
2 misses, 2 hits.

11. My goal is to pursue a PhD in CS in a top-level university and become a professor to contribute more to the field. I think the biggest challenge must be my mental health. Since I'm not a hundred percent sure if I can survive the big pressure of a PhD education and professor work. I'm planning to try my best to balance my life and work so that I can have better mental health. I think that always keeping up with cutting edge research will make me more motivated. Every time that I think about how state of the art CS technologies can be helpful to people in need if properly applied, I feel so encouraged. I want to tell my peers with similar goals to care for their mental health and always stay inquisitive.

2019/11/25 09:53

Actually, I have never had a goal and let nature take its course, just take attention to this moment and ignore what will happen in future. It may be wrong, but I want to follow my mind. By the way, my suggestion is when you meet the bottleneck, try to relax.

Feedback：

I think interaction in class is helpful. But sometimes I am afraid to answer questions because I am not good at English speaking and it is hard for me to organize language in a short time. Besides, I think I can hardly think about the question when teacher call my name. In other words, I am afraid to be laughed at.

Sometimes KG will ask interesting but not so important question in class. It should create an active class atmosphere if there are always some students willing to answer it. But if no one wants to answer it, it will waste a lot of time. So I suggest that KG could only ask important questions or skip the question if no one wants to answer it in a short time.

Plan:

I want to get a higher degree and finally be a faculty. But I don't have a clear plan and I don't get any helpful advices and I don't have any friends with the similar goals.

Dear kg:

Hi! I am really glad to have a chance to write an email to you. This is a refurnished version compared to the paper version.

For the first part of Q11, I would like to say I appreciate your way of teaching very much. You are such a kind and humorous teacher that I've hardly met before. Treating us just like a friend and making jokes with us ease my pain at learning a hard course though many contents of the course had been taught in *Computer Organization* before. My personal feedback is that I saw some malicious anonymous members in the QQ group say some dissuading words that may hurt you and other students' emotions. I really want to tell you not taking them seriously and just being safe and sound. Another suggestion for your course is that I think we'd better go through the leaving course contents in a quick way otherwise we'd be in a rush in the near future.

For the second part of Q11, the part about myself. You said in the Q11, "s*ee the world not as it is, but as it should be."* This is really an encouraging quote, however, I don't think it applies for most of us. Most of us are just normal people who will only live a normal life, we'd better see the world as it is and then try to adapt to the environment since we do not have such great power to change the world as it should be. I am not a man with self-motivation nor a man with self-abandonment. For my future ambition, I want to acquire an M.S. degree, since I don't think I will have a great interest in the academy, then join the industry area. However, I always think I am with goals but perseverance. I really hate it when I have to recite the boring words in GRE, I do think they are really useful in some deeper reading however reciting them is just so boring and then forgetting them is even more frustrating. Besides, whenever I think about the future I would feel so nervous, not a good feeling. As you said "*the third year cannot be more important to decide your future*", though I still hold the point that there's nothing that can really determine your future, I agree with that the third year is really important. I am currently hesitating about whether to apply for an intern or join a lab, would like to give me any suggestions?

Thank you so much for giving us the chance to express ourselves, the Q11 is really a good question. Thank you!

Finally, thank you for your tutor this semester!

Best wishes

Actually, I don't have a definite ~~for~~ plan for my future. Before going to the college, I wanted to go abroad for research. But now, I find that I am better suited to engineering than research. I want to gain a master degree in ZJU and then try to find the true way for myself. Because of my poor English, studying in ZJU is ~~more~~ much easier than the school in America. I concentrate on the courses I am studying and try to get a high grade to ~~make~~ put myself in a good position. And some senior students have advised me about joining a research ~~lad~~ lab or participating some competitions. However, I haven't put them into practice since I am busy with studying. So I should balance the study with the other parts about improving me. This is also the suggestion I'd like to offer peers who are confused with the future like me.

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浙江大学
ZHEJIANG UNIVERSITY

11.

~~For~~

As for me, ~~the~~ ~~in~~ my ~~g~~ futurn plan right now is to work in the University as a teacher or ~~read~~ work in a company as a IT engineer. I plan to ~~work as~~ ~~get a P.h.D in a~~ study abroad ~~in an university~~ tik to get a P.h.D. ~~to~~ ~~We no~~ The reason why I want to work as a teacher or as a ~~g~~ IT engineer. is ~~because~~ that I want to get a better job with enough money to support my family, and when I ~~need~~ ~~some~~ want to do something, such as go travelling, ~~or~~ ~~do~~ I won't hesitate because I can not support it.

~~The~~ ~~know~~ I know there will be ~~some~~ difficulty in acheiving this goal because ~~there is less~~ ~~time~~ ~~not everyone~~ only a few people is able to get to this position and I am not a genious. How ever, I think I should ~~insist on~~ keep trying because ~~everyone~~ ~~should~~ ~~it~~ it is the only way ~~we should do~~ I can having a ~~good~~ ~~happy~~ good life.

Some senior student ~~to~~ ~~talk~~ ~~thinks that~~ adviced me to take more course during my free time and try to polish ~~all~~ my English speaking, and really helps me alot. And I think ~~in~~ the other student should part more actively in class

Feedback：

I think interaction in class is helpful. But sometimes I am afraid to answer questions because I am not good at English speaking and it is hard for me to organize language in a short time. Besides, I think I can hardly think about the question when teacher call my name. In other words, I am afraid to be laughed at.

Sometimes KG will ask interesting but not so important question in class. It should create an active class atmosphere if there are always some students willing to answer it. But if no one wants to answer it, it will waste a lot of time. So I suggest that KG could only ask important questions or skip the question if no one wants to answer it in a short time.

Plan:

I want to get a higher degree and finally be a faculty. But I don't have a clear plan and I don't get any helpful advices and I don't have any friends with the similar goals.

I plan to pursue a doctor's degree in machine learning.

Generally speaking, it takes two steps to achieve it. First, get accepted by a university. Second, work hard till I finish dissertation defense. However, it is not as simple as it sounds. The current challenge is the first step. To be specific, there are three questions to answer.

1. How to get accepted? The easiest one. Strong recommendation letters, great research experience, high GPA, and above-average T/G scores.
2. What is my interested field? Define **interested field**: the field that you will not get bored with even after working on it for a long period.
3. Who should I work with? The most important one. The professor will work with you for the next at least 5 years.

I think you have to be motivated once the decision is made. The further you go, the more determined you are, because there are hardly other ways out, and your dream is coming closer. In a word, just rush and do not look back.
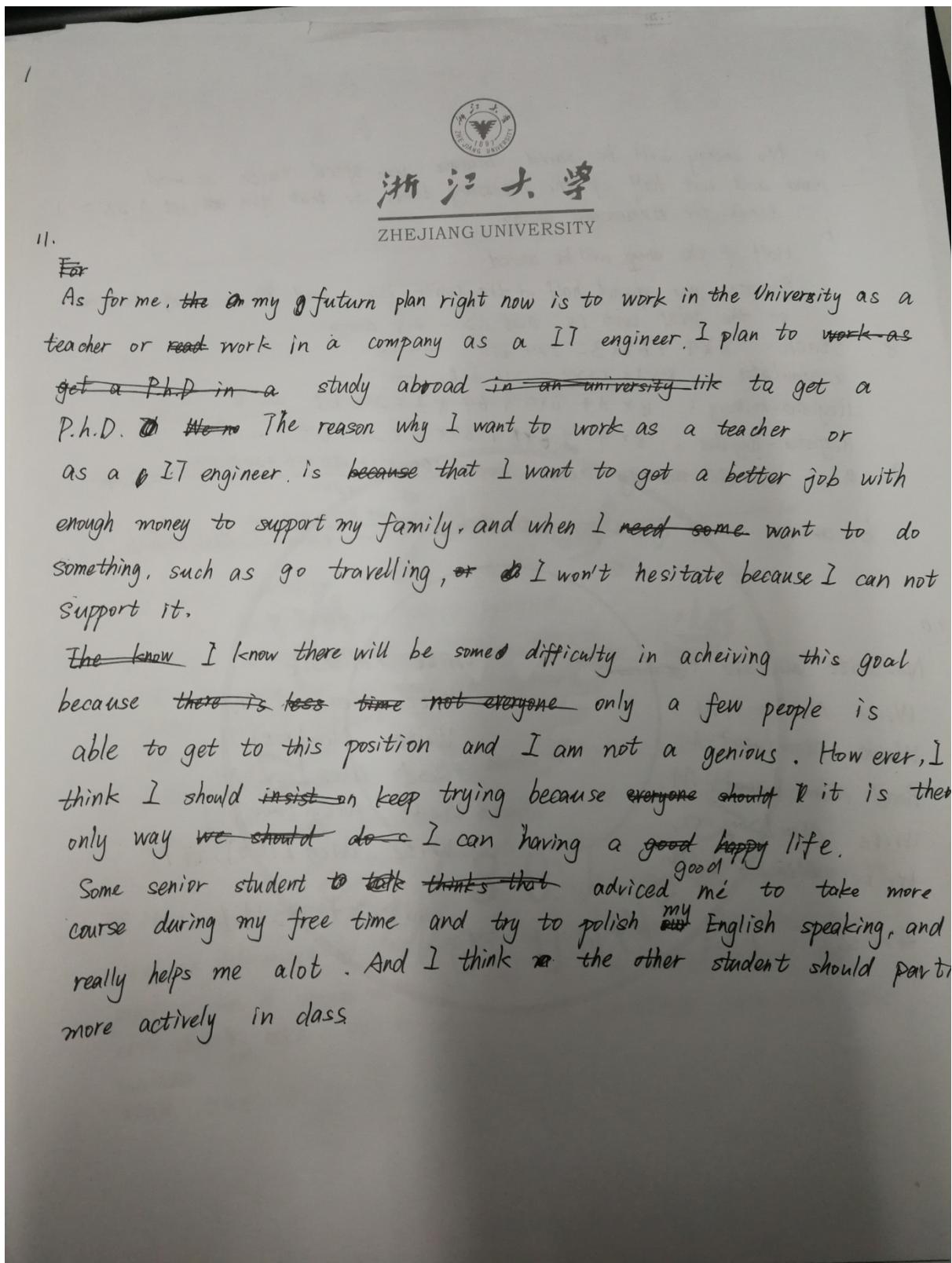
Expected suggestions from senior students and professors: how to build a scholar networking?

Suggestions for peers: machine learning is too hot, but carry on if you really enjoy it.

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Thank you so much for giving us the chance to express ourselves, the Q11 is really a good question. Thank you!

Finally, thank you for your tutor this semester!

Best wishes

Dear brother Kai,

Many thanks for your sincere and inspiring words to us. Honestly speaking, it's my first time to get such care from a course teacher. Usually, most of our previous teachers would not spend their precious time on us, caring about our thoughts, ambitions or any plans… I am very glad to share some of my thoughts and plans with you here.

Currently, my interest mainly concentrates on theories about Artificial Intelligence. My early interest on that arose when I was at high school where I joined the informatics competition team and learnt to write my first line of C programming language code. During this early experience, I learnt not only programming techniques but also principles and theories about data structures and algorithms. At that time, I was really astonished, hearing the news that AlphaGo, a searching program defeated the top human Go player Sodel Lee. I knew how hard it is for a searching algorithm in Go game to beat a top human player due to the exponential expansion of searching tree's size. My high school contest coach told me it is the large amount of historical game data that enables the searching algorithm to make decision heuristically. How can the searching program learn from the data and perform pruning automatically? Back to that time, it is really beyond me and it's my first time to know the power and magic the data can give us.

After taking the basic course on mathematics and the introduction course on AI in college, I came to know how did the machine learning work. It comes to me that, the so called machine learning or deep learning on data is in essence just a fitting problem given data points. Also, the so called intelligences are just the regular patterns or priors hidden in data, and to get these patterns, all the things we need to do are just defining an optimization target function and performing gradient descend. These simple and elegant results really made me obsessed.

And to further dig into this field, I joined   Lab) where Computer Vision (CV) and Natural Language Process (NLP) are of the key research topics. I learned many things there, read some papers, performed some experiments, earned many things… But this experience also make me a little bit lost now… My original plan is that maybe I can be a researcher in AI field. But I notice that there may be a big bubble in this field.   This year, the number of papers submitted to the some top AI conferences are even over 10,000. And most of the works on deep learning are just done by intuition and pure empiricism… From my perspectives, the current deep learning research lacks of rigorous and consistent theory, which makes it easy to get started and hart to go deeper.

Be a researcher or engineer? Continue with AI or try other interesting topic? I am still finding the answer. With such feeling of confusion, recently, I am applying for a UIUC 3+2 MEng program on ECE organized by faculty of engineering in our school. Maybe after changing an environment, learning some new courses abroad, exchanging ideas with some foreign professors, I can get a clear direction of my life? That's what I think, at least for now… Over ten students apply for this program this year and only 5 students may get admitted. So I am a little bit stressed recently. All right, just see what will happen next.

This is the third year for my college study. But I have to admit, I do not put too much of my time and energy to the courses this term. The enthusiasm seems have gone. You see, I am really tired of the courses in ZJU. For the first two years in ZJU, I devoted myself fully into the courses. But many teachers just did not care for you at all. They were just completing their teaching tasks, reading the slides… You put many efforts on some projects, carefully design every details. When it's your turn to give a representation, they won't listen. They are just counting the time, urging you to give a quick speech. "Don't talk about these details, just show me the results." They will say… OK, I know time is limited in the course. I write my report carefully, details mentioned, key points exhibited. But will they read the details carefully? They are too busy on their business. So many students in the course… Impossible to read carefully and give a precise feedback. I am not intending to blame somebody. I know it's not easy for all the teachers. Just disappointed and tired.

But there are indeed teachers that I really appreciate. In my first term, I take a general course named Introduction to Game Theory, given by Mr. Wenhua Jiang. It's a really interesting course. I write a thesis with over 14000 words, telling all my thought on the given questions. Mr. Jiang read it and sent me an email, giving me many good words. Yes, it's just a simple feedback, not just a cold score. I am really happy. Another experience is when I am taking the general course, Introduction to Neoinstitutional Economics by Mr. Xiang Zhang. After reading my homework thesis, Mr. Zhang invited me to a lunch, discussing about some interesting topics in my work. That's really inspiring.

Also, I am very moved by your surprising assignments. Yes, it is not a personal letter for a single student, it's just a letter for all students, seemly not so special. But the sincere and inspiring words really make students feel that they are important to the teachers and the teachers really pay attention to them. Although I am not so hardworking in your Computer Architecture course and even not so interested in this course, I really want you to know how happy I am to receive such a letter and really appreciate your kindness. I admit that I am not interested in hardware and system related courses, but those interesting principles and ideas learned in your course are absolutely useful for me.

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Dear teacher:

This is my answer for question 11.

As for my plan in the future, I think I would like to take a master degree in information visualization. As an undergraduate, I am very interested in front-end developing and have ever been interned in CASIA as a front-end programmer, this technology is a key developing method in data vis area. So, in fact, I am willing to become a full-stack data vis architect in an enterprise, but a good front-end programming literacy is not the only request, I should also be familiar with relative algorithm models. So, I need a graduate program to do more researches on such models and take part in more projects in data vis to enrich my experiences.

And for the interaction on class, I would like to say that I really don't like to be asked to answer any questions since I was a primary school student. Perhaps my acceptability is really weak that I cannot do the quickest response to what I just learned, so, I think it is embarrassed if I cannot say any words. Another reason may be my English is poor makes me not active in class.

11. Thank you very much for the your's teaching this semester, we can feel your sincere and enthusiasm. I really gained a lot in this course. I think the interaction of the course allows students to participate in the course better, but asking questions can be a bit scary, for me, I worry about whether I will answer the wrong question. Maybe we can try something else?(though I don't know how)

ps：另外另外，今天上课突然有有一个脑洞，既然体系课唯唯诺诺，匿名群重拳出击。上课实时匿名发弹幕到旁边有没有搞头（逃

I want to continue my postgraduate study graduation but I have not yet found a direction that I am extremly fond of. I'm just learning as much as I can, playing CTF, try a new language, read some interesting book and be intership in an enterprise.

It's quite difficuilt to be motivated and determined without a target, even a small thing may interrupt me. I'm trying to make my like regular and try more fresh things.

It's useful to communicate with senior students and professors, they can give me more extensive advice. Sometimes as an experienced person, they can also help me avoid the detours. I also try to learn from their strengths and make me a better person.

I prefer to pursue a higher degree. I hope I can continue to get master degree in Zhejiang University. Since I have taken some class in CG and take part in some visualization project,I think I would like to continue study in aspect about Graphic.To fulfill my dream, I'm searching for opportunity to learn in labs and participate in more project. Actually, I am not quite sure about what to do and how to do,but I hope I can figure it out gradually. Best wishes to all of us!

you learn through this class---whether it be computer architecture per se, a
y it implies, a study tip or inspirational quote we share, or a new friend you
eeps driving you toward your greater self, this course fulfills its mission.

ar, you are highly expected to develop a clear vision and be determined to
. Most students in the computer architecture class are junior. The third year
nore important to decide your future. If you aim to work in an IT company
ation, start practicing skills that help you ace the interview. If you plan to
igher degree, join a research lab to cultivate research experience and
materials. If you have not decided, do both if your time and energy permit,
ne you really prefer. Try to make your decision based on your own goal
ce. Work with people who keep your interest and passion alive. In return,
e initiative that motivates yourself and people around you.

ld not as it is, but as it should be."

question, I would like you to share your thoughts on your goal and plan.
, what is your goal after graduation? What is your plan to achieve that
at challenges might be involved? How do you manage to be motivated
ed? What helpful advices or suggestions did you get from senior students
s? What suggestions would you like to offer peers with similar goals?

ou? Here.

it? Now.

1? This moment."

我希望毕业后能保研，至于是否深造可能要看自己在研究生期间的发展.(当然目我是希望出国读博的:)).我会努力提开GPA做好科研.我觉得前人给我的经验是做事一定要有目标和计划，不能浪费时间. 冲冲冲!

11. After graduation, I want to continue my studies and get a doctor's degree. To achieve the goal, I'd like to improve my GPA and try my best to be recommended for admission to be a postgraduate without exams, and then be a PHD candidate. However, I'm facing some challenges. I know the GPA of junior is the most important during university if I want to get recommended, so I feel stressful in lots of course and have no spare spirits to go to lab for research. But I indeed learn that if I want to get PHD degree, joining a lab to cultivate research experience as soon as possible is better. So I feel anxious everyday but have nothing to deal with it. To be honest, I want to work directly after graduation but my parents want me to get at least a Ph.D. Their eager expectation is the only driving force for me.

From senior students, I know the recommendation number is less and less. From my tutor, I know he didn't agree that I could continue to do research. I have no suggestions to others because I really perform badly in study and research.

选择的崇高

闻某君加入某老师实验室,不免有些思绪。某君是我在社团相识的,十分出色的同学;某老师则是我的大一某课程的老师,也是我所见过的浙大计算机学院的中,为数不多的能够令人感受到对计算机科学的热忱的老师。当初某君在计算机学院面试时主面试官恰巧是某老师(彼时的某君还并不知晓这一点),后来在选课之时,我也大力推荐某君选择某老师的程序设计专题,这经历无疑是令人感觉颇为奇妙的。

我们时刻都在做选择,这些选择有些在当时的节点看来不过稀熟平常,但是日后它们的意义便会显露,有时甚至会引向迥然不同的人生之路。在选课时选择某老师的程序设计专题并非易事,因为这课程与面向大类学生的程序设计专题有所不同,它本是面向竺可桢学院的学生。可想而知,做出这样一项与常人不同的选择是需要勇气和决心的。我虽大力推荐某老师的课程,也可以用我大一的经历告诉某君这是一个可行的选择,但我毕竟也无法确保这不会带来任何意外,一切仍需某君做出最后的决定。好在某君最后做出了选择某老师的决定,并一直到今天最终加入了某老师的实验室,可以说之前一切选择的意义,到这里终于显露了出来。

有时我们在观赏一些交互性剧情导向的游戏时,常常对一些看似无关紧要的选择肢却造成了全然不同的剧情导向的情况进行抱怨。实际上,这些选项如此处理,并非纯粹是艺术上的夸大或是为了延长游戏时间云云,毋宁说,这是对现实生活的一种模仿。只是,游戏时间不过若干小时,几十上百小时,人生却相下漫长许多。可以说,游戏是凝练了的,抽象了的人生,也可以说人生是稀释了的游戏。当这些选项,它们的深远影响,被稀释到人生若干年的漫长时光中,它就给人以更为轻微的震撼;而游戏却在短短数天之内,集成了激烈的冲突,这种戏剧性般的构造让我们有所体察。当我们在欣赏这类游戏时,可以说我们在欣赏它们的剧情,但如若失去了对选项的审美,那么就和一般的文学或影视没有什么不同了。

这种审美是对何物的审美?我并非美学方面的专家,事实上我连入门者都远远算不上;但是此处,我仍要做一番大言不惭。毫无疑问,这审美与对优美的审美没有很强的相似性。回到那个老生常谈的比喻,一个暴风骤雨的黑夜,一望无际的大洋,大洋中心的巨大的、深邃的漩涡,以及船只、舵手和残骸。大洋是无限世界的暗喻,暴风骤雨的夜晚是世界的基调的暗喻,漩涡则象征着世界的客观性。那么船只的航迹无疑就是每个人的人生之路,被舵手——亦即理性的象征操纵,却又时刻被漩涡左右。我们可以看到,在这世界之上有的舵手在倾力扭着他的舵;有的已经放弃,等待漩涡将他的船吞覆——然后便成为漩涡的一体,称为迫害其他船只的一部分;有的船已被巨浪打得支离破碎,但船上的人还拿着浆。无论他们其中的哪个人,都难以真正掌握船的航迹,但舵又着实就在他们手中。这就是对选择的境况的比喻。

假若我在因特网上所见二手乃至若干手文本不虚,那么这种选择的境况无疑符合,崇高的范畴。

> "高耸而下垂威胁着人的断岩,天边层层堆叠的乌云里面挟着闪电与雷鸣,火山在狂暴肆虐中,飓风带着它摧毁了的荒墟,无边无际的海洋,怒涛狂啸着,一个洪流的高瀑…诸如此类的景象,在和它们相较量里,我们对它们抗拒的能力显得太渺小了。但是假使我们发现我们自己却是在安全地带,那么,这景象越可怕,就越对我们有吸引力。我们称这些对象为崇高,因为它们提高了我们的精神力量越过平常的尺度,让我们内心里发现另一种类的抵抗的能力,这赋予我们勇气来和自然界的全能威力的假象较量一下。它使我们认识到我们物理上的无力,但却同时发现一种能力,判定我们不屈属于它,并且有一种对自然的优越性,在这种优越性上面建立着另一种自我维护…,在这里人类在我们的人格里面不被降低,纵使人将失败在那强力之下。"(《判断力批判》)

当我们做选择时,一切看似稀疏平常,但是我们若有意识地去想象那个比喻,我们就可以感受到,平静的现象世界背后实则已经波涛汹涌。当你具有对选择的崇高体验时,你就会将选择看做重要的事情;这样做不是出于为了追求"长远"的世俗意义下的成功而深思熟虑,而纯粹是为了对选择的崇高进行审美。许多人对做选择这件事情并不重视,正如前文所说的,在人生的尺度上,选择的影响是被稀释的了。在没有对崇高的体验下,人们对选择的态度,就不难是"走一步看一步"了。

After graduation, I want to find a stable work, which mean I needn't worry about if I would be fired before 40 years old, but I still intend to find that kind of work in IT company.

The biggest challenge may be that I must study hard to have a knowledge of new techs when working and my body may be unhealthy to fit my work.

My parents can give motivation to me, and I just want them to have a happy life when they're old.

I get no very helpful advices from senior students and professors, because I'm not very good at communicating with others for my first two years of college life.

Trying to do best and trying to get more information about work are the only two suggestions I can give them.

In a further way, my goal is clear, which I can offer a good condition for my parents, my wife and my child. However, this does not mean that I have to be so rich to support that. All I want to say is that enough is enough. If you have to make a digit to specify 'enough', I think if my life can be over 70% of people in this city. Therefore, study is just a fast and easy way to achieve this goal. I had to admit that study is not attractive to me. What is really attracts me is what study can bring for me. In my opinion, a higher degree can make me closer to my goal, which is also easier.

However, there is also a challenge for me, which is that my grade always makes me at a dangerous edge to get a higher degree. I really worry about that. According to this situation, I consider that if I lost the chance to get a higher degree, I would like to go for a job. Therefore, I try my best to get grades and join a lab to do something, which is not smooth. I would like believe the students in Zhejiang University will have some great goals, and I also believe the situation is different with each others. The most important thing is I know what I really want and I am trying my best to get it.

There are something irrelevant I want to say to professor Bu. I really appreciate this question you apply. I really think much about my condition right now, which makes me a little bit relaxed. What's more, although students of Grade 17 are not active in class, we really think you are a really nice teacher. The reason why we are not active is because other class is the way that teachers speak to students, and the duty for students is just listening. So, at the beginning of the class, we just can not adapt the way of your classes. We never think the way of your classes is wrong, and most of us is gradually adapting the way. So, just keeping your way is best.

亲爱的凯哥：

你好。

首先着实感谢您的真诚与用心，半夜看到这封信着实是温暖的，坚定了我接下来写实验报告的心。

坦诚来说，这门课的地位本身就比较尴尬，除去流水线的实现，其他的知识点大都在其他课程中能看到身影。再加上对于硬件课的成见，大家没那么上心也是难免。
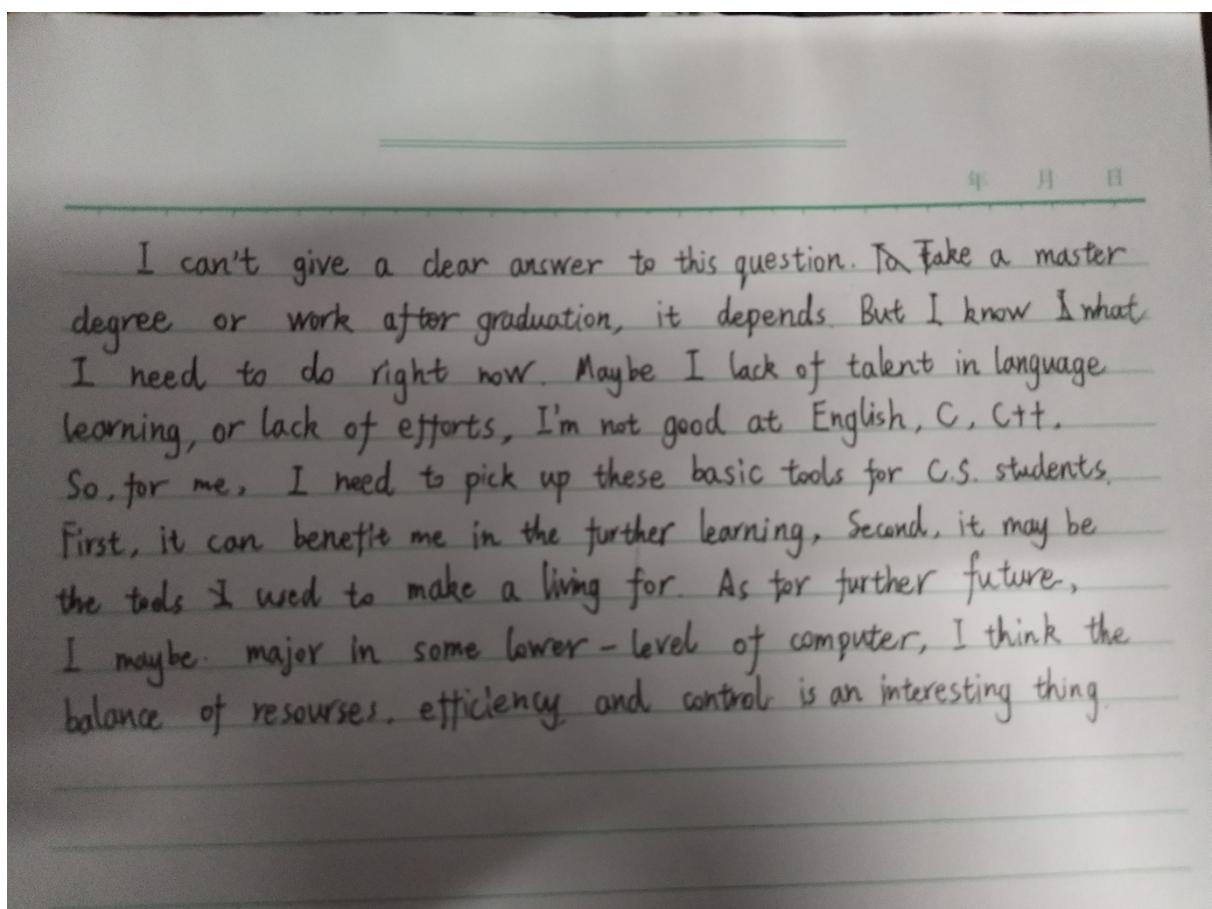
课堂参与度的问题，我觉得老师不必沮丧，除去课程问题本身较难，英文讨论不便，更多的还是同学本身的原因。在我上的各个计算机类课程中，大家活跃度其实都不很高。有的老师明确规定出来互动加分，活跃度会高一些。而一个班的氛围基本一旦成型了，后面再改就比较难了。老师如果希望能有更好的互动，建议从开始就明确出自己的激励机制，培养学生习惯。

至于老师所问的"给同伴的建议"，我只能说，大家尤其是群里直面社会压力的朋友们，都太过焦虑了。没必要总是和别人比较，绝大多数的难过都来自于比较。比较可以作为向目标靠近，变强的工具，但不应该成为要追求的意义本身。延毕一年也没啥的，好好思考下想做什么是值得的，大多数的压力来自于自己对自己不匹配的期望。没必要吧。当然，大家都有自己的哲学，只是凯哥问了，我就说说罢了。

总之，
1.英文好难；
2.建议设计激励机制；
3.谢谢凯哥。

I can't give a clear answer to this question. To take a master degree or work after graduation, it depends. But I know I what I need to do right now. Maybe I lack of talent in language learning, or lack of efforts, I'm not good at English, C, C++. So, for me, I need to pick up these basic tools for C.S. students. First, it can benefit me in the further learning, Second, it may be the tools I used to make a living for. As for further future, I maybe. major in some lower-level of computer, I think the balance of resourses. efficiency and control is an interesting thing.

Kg, I think there are a lot of things in the architecture course that are duplicated with the contents of the "Computer Organization" course. You can ask the teacher who has taught the Computer Organization, such as Teacher Jiang Xiaohong. The content in this part can be roughly explained. This should save a lot of course time.

As for why I don't like to answer questions in class, there are two reasons. The first is that I don't have confidence in my knowledge, and I am worried about answering mistakes and making a fool of me. The second reason is because my spoken English is very bad, I am very worried that my classmates laugh at my spoken language.

Good night, Brother Kai! Here I want to express my thank to you since the class of computer architecture is really interesting and helpful. At past, hardware courses have always been troubling me a lot, since I'm not very interested in them and the laboratory is pretty hard. But the feeling of taking computer architecture class is really different. I feel happy to take your class. The atmosphere in the class is really enjoyable.

As for suggestions, I think that you may tell us more about the details of our laboratory. It's always hard to combine the theory learn from class to practice. Furthermore, may you give us more questions appear in the past final examination, since the unknown final examination really trouble us a lot.

As for my future, I do not think I'm very interested in doing scientific research, and I preferred to go to the company and earn money earlier ˆ_ˆ. But first I want to continue to study and get a master degree to learn more knowledge and test if I can do the research well. Hoping to get some help and suggestions from you in the future. But the most important thing at the moment is to learn Computer Architecture well(and other professional courses), and I will pay more attention to these courses in this time. Thank you!

After graduation, I would like to pursue a higher degree abroad. In this semester, I am studying English and taking GRE. And I hope I can pay more attention to my research experience in this winter vacation and next summer. I am also now trying to participate in a valuable summer research next summer. All of these stuff are challenges, and no one can may sure that they can do well in all of these complex things. However, I believe that keep fighting and moving forward can make sure that I will finally learn a lot from this journey.

Date

11. "Wherever you go, There you are"

My goal after graduation:
Actually I don't think I'm a man who has
a high demand for life standard. All my
goal is to find a comfort position in society,
instead of struggling for my life. My ideal
job is to become a game designer or developer.
To achieve this, I need to learn far more
knowledge than I've mastered. These knowledge
is not only about programming, but also about
culture, language and so on. I hope that by
learning these, I could become interesting and
learned even though I ~~didn't~~ should not achieve
my goal.
As for how I manage to be motivated and
determined, I actually have no idea, because
I seldom think of my goals, dreams or something
similar. I prefer to do my daily work, and make
sure I didn't waste too ~~my~~ much of my time.
For the next question, I rarely learn from others'
advice unless it's about academic. That is not
because conceit. I think that for everyone,
his or her circumstance of life differs a lot.
And everyone only lives once, though some
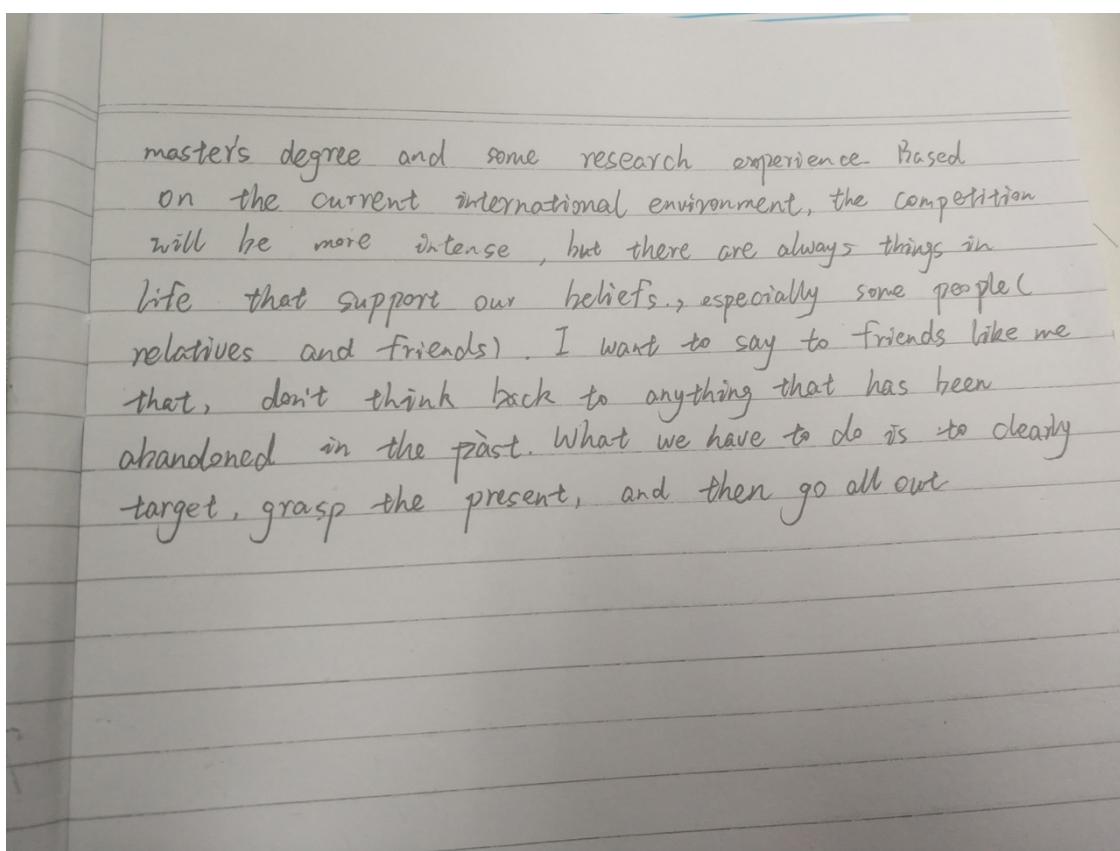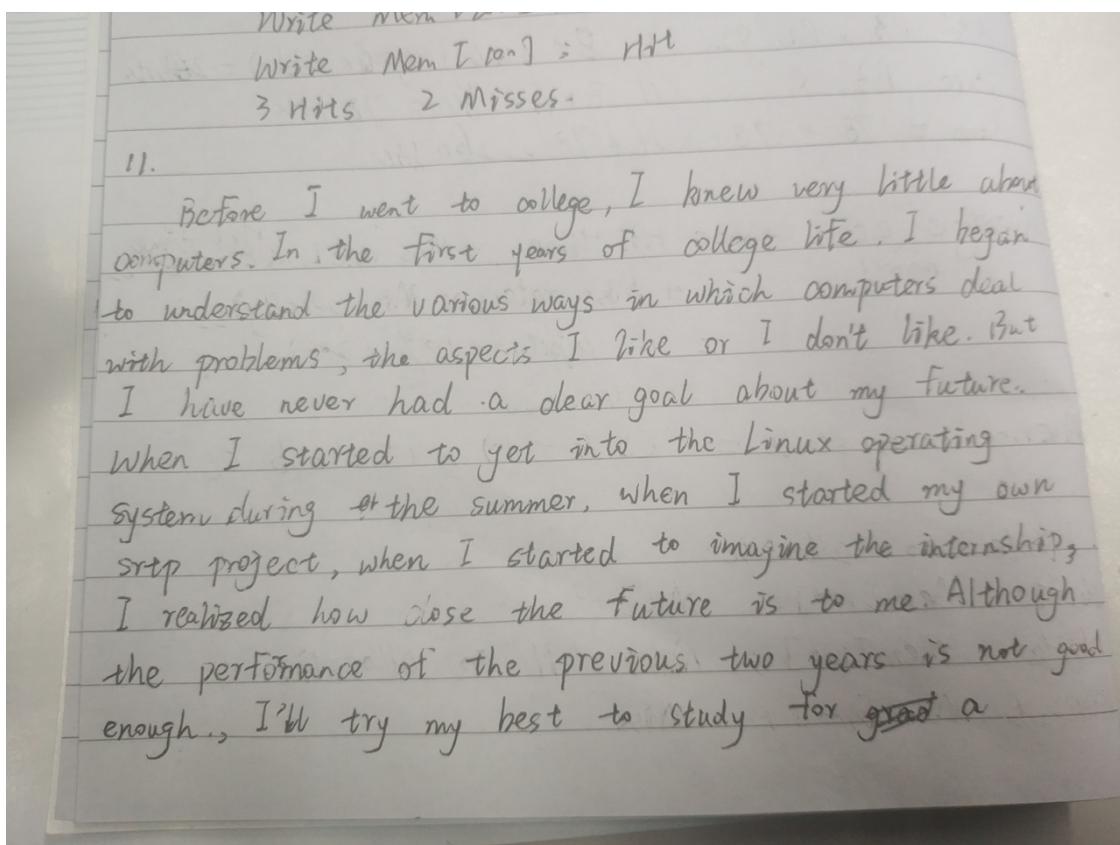
has lived much longer than me. Most these 'advice of life' sounds profound, but are not as useful as they sound like. I would rather do what I like to do and what I think I should do, instead of listening to what other people ~~would say to me~~ think I should be. As for last question, I can not come up with something useful. If I do have some suggestions to give, that is: Whenever you are thinking hard about whether to do something, just think about if you ~~will~~ would regret if you didn't do it. If the answer is yes, then you need to do this thing.

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I may be a intern student in ByteDance company in 2020 summer. And I want to purchase a higher degree in ZJU. Because of military service, I may drop out for one year after the end of junior. I appreciate kg very much, who are very kind and careful. But I still have some suggestions for the course. Most student don't listen carefully because some knowledge you emphasized have already leant in organization, which you spent too much time. I hope kg can pay more attention to the new knowledge and ask fewer questions. Thanks for reading it and I will always stand by kg!

Write Mem [...] = H+1
Write Mem [10n] = H+1
3 Hits   2 Misses.

11.

Before I went to college, I knew very little about computers. In the first years of college life. I began to understand the various ways in which computers deal with problems, the aspects I like or I don't like. But I have never had a clear goal about my future. When I started to get into the Linux operating system during of the summer, when I started my own srtp project, when I started to imagine the internship, I realized how close the future is to me. Although the performance of the previous two years is not good enough, I'll try my best to study for grad a

master's degree and some research experience. Based on the current international environment, the competition will be more intense, but there are always things in life that support our beliefs, especially some people (relatives and friends). I want to say to friends like me that, don't think back to anything that has been abandoned in the past. What we have to do is to clearly target, grasp the present, and then go all out

不知不觉中大学已经过了大半，从充满激情到迷茫再到厚积薄发，反而对未来的期望没有那么强烈了，现在在一个心理学实验室打打杂，可能考虑考计算机研究生或者跨到心理学。功利点说，学历是最低的要求，当然在自己兴趣里是最重要的，有了兴趣，做什么都比较有耐心毅力，总之现在相应的绩点和研究经历是比较重要的，不得不说，大三是真正开始进行横向选择的时期，保研、考研、就业等等，对于一个还未真正进入社会的人来说，的确是摸黑前进，身边也大四保研的学长，在实习的同时，好好规划自己的生活，也是非常优秀。学习是个永无止境的事，无论怎样，都要时刻投资自己。

说回这门课，对我来说，最大的困难还是英文吧，上课听得很困难，要课后花点时间补，但是能看出来 kg 讲得很认真，kg 也经常叫同学起来回答问题，也尽力讲清楚每个知识点，我会加油学下去！

When it comes to my thoughts on my goal and plan, it sometimes changes during my adolescence. But now it becomes increasingly clear.

My goal after graduation is to pursue a higher degree. I will try my best to get into a school to achieve a master's degree, maybe in ZJU, or abroad. After graduation, I may get into an IT company, doing research and development. The challenges are about research experience and foundation. On the one hand, the courses I am taking this semester still exert a lot of pressure to me, I may don't have abundant time spending on researches. On the other hand, a good team to do research with as well as a good research topic is really hard to meet. I sometimes receive too much peer pressure which makes me anxious and perplexed.

I asked some senior students and professors for suggestions, and I listen to some of their experience. I hope that after this semester, I won't have so many courses to work on, so that I can concentrate on a specific field that I am interested in and eager to get advance education in. Actually, it is exactly my plan when I chose to have a lot of courses this semester.

It is the first time I am asked about my goals and plans in an academical course. Mr. Bu always gives me some surprise in many aspects. I really appreciate that I am a student in your class. I hope that we all enjoy our experience in this class.

迷茫中……我很想去做音乐计算相关科研，可是我的课题组在香港……那边的局势……太让人痛心了……和体系结构这门课衔接不上……再加上英语很烂……全英文上课还有些勉强……再加上内向的性格完全不敢发言……不过始终要对自己的能力有信心，这种小小的困难只要有气势和勇气就能轻松解决的。这学期还是老老实实把绩点和英语搞一搞，先把每次作业都做好，每次实验都做好开始，坚持背单词阅读计划开始吧。

11. The past experience has made me realize that security should be closely related with the real-world problems. With that said, my short-term goal after graduation is to work as a security engineer in a leading company, after which I hope to set up a security tech company to tackle privacy preserving issues.

我的目标是在我本科毕业后继续攻读研究生 如果可以拿到保研名额的话就选择保研 如果不能拿到保研名额的话 我可能会选择考研。我目前的成绩对于保研来说还不够，所以我需要在大三一年尽我最多的努力，提升自己的成绩。同时我也会争取进实验室跟随导师进行一些科研项目。在学习方面，许多学长学姐可以帮助我答疑解惑。通过他们我也更加了解一些关于研究生的具体生活，以及在研究生选择导师以及学校的一些建议。我能给予与我具有同样情况的同学的建议就是专心学习 沉下心来，不要被外界的诱惑，或别人的其他选择所吸引，坚定一个道路努力下去终会获得你想要的结果

goal:

> After graduation, I want to be a teacher, a researcher, learning, exploring and sharing.

My plan

in the short-term, I want to study abroad

- Research experience
- English
- Coding skill
- Consolidate the basic knowledge

challange:

> The biggest challenge is myself.
>
> I'm not that brave, hesitant before or even after making choices, always doubting myself. I'm not that movitated. I want to leave all the stuff behind and seize the moment to enjoy and relax.
>
> The other me ask me to fight.
>
> I'm denying my self, fighting against myself. But there is no winner, I win means I lose.

How to be motivated?

> Emmm, hard question. My high school teacher asked me to find the answer, but until now, I'm still exploring.
>
> Often, when I'm going do something, the first thing comes to my mind is "I need to do that", not "I want to do that". So if one day, I could say "I want to do that", I would be really motivated. Maybe that day is getting closer, hahaha .

Helpful advice:

> If you want to do something, just do it.

11. [10] Wherever You Go, There You Are

I hope you really enjoyed the class (at least for some moments) so far. You decided to study Computer Architecture with me among several instructors. I truly appreciate your trust and support. Ever since we met, I keep working on how to provide you with a satisfactory learning experience in return.

For almost all previous editions of this course, an assignment question sought to solicit thoughts and suggestions from the participants. For example, do you gradually understand strategies or things from different perspectives and weight their tradeoffs? What do you think is the real challenge for you to learn this course? Do you consider interactions in class helpful? What held you back when you were trying to ask or answer questions in class? What suggestions (for better learning this course) would you like to provide to other students? What help or assistance would like from me or other students? All their thoughtful and constructive feedback has encouraged us toward a more rewarding computer architecture class.

This time, I would like you to introspect beyond this course. Taking a course should be rewarding in many possible ways. As we discussed in the first lecture session, even if you may barely practice computer architecture principles after the class ends, if whatever you learn through this class---whether it be computer architecture per se, a philosophy it implies, a study tip or inspirational quote we share, or a new friend you know---keeps driving you toward your greater self, this course fulfills its mission.

In particular, you are highly expected to develop a clear vision and be determined to strive for it. Most students in the computer architecture class are junior. The third year cannot be more important to decide your future. If you aim to work in an IT company after graduation, start practicing skills that help you ace the interview. If you plan to pursue a higher degree, join a research lab to cultivate research experience and application materials. If you have not decided, do both if your time and energy permit, see which one you really prefer. Try to make your decision based on your own goal and experience. Work with people who keep your interest and passion alive. In return, be part of the initiative that motivates yourself and people around you.

"See the world not as it is, but as it should be."

??With this question, I would like you to share your thoughts on your goal and plan. For example, what is your goal after graduation? What is your plan to achieve that goal and what challenges might be involved? How do you manage to be motivated and determined? What helpful advices or suggestions did you get from senior students and professors? What suggestions would you like to offer peers with similar goals?

"Where are you? Here.
What time is it? Now.
What are you? This moment."

I've joined Prof. Wenbo Shen's lab trying to be motivated in system security. Before this semester I have considered it for many times.
I think it is always the best to upgrade myself but not worry about peer pressure!

For the class. I think a class with 30-40 students can have a good discussions but a class with more than 60 students is more suitable for teacher lecture only.
简言之，30人小班化(如通级)更适合讨论性质的课堂

学习一门新知识往往感到陌生，但是随着学习的内容增多，知识会变得越来越具象，这就是学习给我的感觉。

计算机体系结构的真正挑战在于从计算机实际实现的角度，从细节和实际情况下真正理解计算机的各种机理，之前学习的计算机组成是对计算机组成理论的轮廓的勾勒，而计算机体系机构是计算机组成的延伸。

平时上课也比较忙，上课发言的话，感觉自己没有这个习惯，还是喜欢做安静（沉默）的聆听者。我也没有什么能给其他同学的建议。

我希望以后能进大公司工作，我也希望能进修高学位。如果我研究生阶段的成绩好，科研顺利，我想去清华读博士。可是这都是后话，现在考研还剩24天，根本没什么把握，还是准备考研为要。

读书不仅为了知识，也为改变命运和出身，光谈象牙塔的理想是不切实际的。

很喜欢卜老师上课。因为老师对同学很好，也很关心同学。不管老师以何种方式上课，都是有着老师自己的考虑，老师非常体贴同学，所以老师也不必太过担心我们是不是都得懂、是不是课堂气氛不活跃，都没事的。

11.

毕业后的目标：本科毕业读研，读完研工作。

计划：整一个还行的 GPA，混个保研，顺利毕业。

挑战：GPA 不是很 OK，班上要保研的大佬太多。

动力和决心：要吃饭的啊，不能回去啃老啊。

得到的建议：没有。希望能得到一点。

给出的建议：早点认识到自己是个垃圾。

Q：What's your goal after graduation?

A: Maybe I will go to Japan and continue studying something about my major. My parents support my decision and my senior friends have been there. So there are people who can teach me how to have my life in Japan and how to entry a school.

Q: What challenges might be involved?

A: Language and ability. I have got JLPT N2 license but I still have to pass TOFEL by a mark that more than 85. Besides, maybe I have to take exams if I want to entry better school. It's necessary for me to learn more and more CS knowledge.

Q: What helpful advices or suggestions did you get from senior students and professors?

A: Practice. Don't choose CS if you want to go Tokyo University.

Q: What suggestions would you like to offer peers with similar goals?

A: I don't have enough confidence to offer suggestions except advice about learning Japanese. Play more ADV game, so we can learn more vocabulary, learn pronunciation and learn listening skill with native speaker.

Extra:

Thank U for giving me chance to take part in your CA class. Maybe you are the kindest teacher I have met in this three years. Have a nice day.

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Honestly I think brother Kai asks too much  questions during the classes, which impedes
the process of teaching. Because I am really vegetable, it's pretty a tough time for me to
follow teacher's pace during the class, especially when it comes to all in English.
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现在是 2019 年 11 月 25 日下午六点分，我一个人坐在寝室的电脑前开始思考作业得最后一题。很想真心地说点什么，这也应该是这大学四年生涯里唯一一次可以认真而不带掩饰地和任课老师说说心里话吧。除去那些所谓地积极却又糊弄人的鼓励话语。

作为一名大四学生，我似乎已经被动的做出了自己人生的选择，是的我选择去了工作，去从事一个和编码相关程度最低的工作。我期待这份工作的很大原因是，逃避。俗话说成也萧何败也萧何。我大学四年的痛苦以及找工作时的相对轻松都是这个专业带给我的痛苦的烦恼。尽管想法消极，但我可以毫不掩饰的说我真的很讨厌无休止的实验和大作业。它仿佛一根弦在仅仅地绷着我，我活得胆战心惊，却又不得不打开电脑开始写作业。我希望毕业之后自己可以换一个环境重新开始吧，尽管这么说显得很是懦弱。我希望自己不再受限于专业，不在金钱上受制于父母，去更多的，没有包袱的追求自己想要的东西。人生不如意十之八九，工作也有可能不顺，这个时候我大概会好好存钱，就像致命女人刘玉玲说的，为自己存一笔"fuck you"资金吧，这是未来我的保障。挑战当然很多，环境的适应、工作模式的改变、新鲜的人际关系，这些都需要我去适应和体验。我希望自己能够在书中以及在和朋友们的交流中获得动力。读书百遍其意自现，书中还有相关网站的经验分享会告诉很多。但是最重要的还是自己。认清自己的选择，然后 follow your heart,不害怕失败。

我在这个专业过的相对封闭，并没有认识一些能给我很大帮助的学长学姐，在学习的过程中常常感到力不从心、甚至迷茫。如果有机会，能碰到自己专业的学弟学妹，我应该会很热心地帮助他们吧，毕竟有一个帮助会觉得压力小一些。这篇大概和所有人的套话甚至积极的、抑或是迷茫的未来憧憬有很多不同。但却是我内心最真实的想法。辛苦老师，您在做我班主任的时候虽然交流很少，但是也给了当时迷茫的我很多温暖，谢谢您！

11. [10] Wherever You Go, There You Are

I hope you really enjoyed the class (at least for some moments) so far.

Yes, it would be better if I won't sleep at the class time any more.

You decided to study Computer Architecture with me among several instructors. I truly appreciate your trust and support. Ever since we met, I keep working on how to provide you with a satisfactory learning experience in return.

For almost all previous editions of this course, an assignment question sought to solicit thoughts and suggestions from the participants. For example,
 do you gradually understand strategies or things from different perspectives and weight their tradeoffs?

I think so.

What do you think is the real challenge for you to learn this course?

The weather, and my bed. I think they are more difficult to conquer than the

knowledge and lab themselves.

Do you consider interactions in class helpful?

Without interactions, why not study by myself?

What held you back when you were trying to ask or answer questions in class?

I am very vegetables, yingyingying.

What suggestions (for better learning this course) would you like to provide to other students?

①kg is a very kind teacher, please protect kg well.

②if you don't need this score, try to listen, to learn, and have fun;

If you need, learn to study by yourself, because you must need this skill.

③Be active to join in the interactions.

What help or assistance would like from me or other students?

Zzs and hhx lai le ma.

All their thoughtful and constructive feedback has encouraged us toward a

more rewarding computer architecture class.

This time, I would like you to introspect beyond this course. Taking a course should be rewarding in many possible ways. As we discussed in the first lecture session, even if you may barely practice computer architecture principles after the class ends, if whatever you learn through this class---whether it be computer architecture per se, a philosophy it implies, a study tip or inspirational quote we share, or a new friend you know---keeps driving you toward your greater self, this course fulfills its mission.

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"See the world not as it is, but as it should be."

??With this question, I would like you to share your thoughts on your goal and plan. For example, what is your goal after graduation?
I have got some offer from several company. At the moment, I temporarily would like to work in a game company. Which made some wow games and no 996.

What is your plan to achieve that goal and what challenges might be involved?
(略)

How do you manage to be motivated and determined?
The real problem is not how to be motivated and determined. However, the real problem is, what and why you want (it).

What helpful advices or suggestions did you get from senior students and professors?
CS major of ZheJiang university doesn't mean much. In fact, if you want a job

after 4 years, especially a job someone like, the "name" of ZheJiang university can help you much less than you think.

What suggestions would you like to offer peers with similar goals?

①If you want to work after graduate and you are grade 1/2/3, I advise that, often looking through the nowcoder.com to know how vegetables you are (or what a large dalao you are.), and looking through maimai(not momo, but you can look through momo the same time.) to find that if the company you want to be in is wherever you really want.

② If you want to work after graduate and you are grade 4, and you have no job now, you can kaoyan or yanbi(x).

③If you want to find a job, you must learn very well about OS, computer network, DS, ADS, OOP. Or you are more likely to succeed if you choose to kaoyan.

④If someone dislike 996, or love to work to make a wonderful game, I'd like to talk with him/her.

"Where are you?
Here.
What time is it?
Now.
What are you? This moment."