1. Being the co-founder and main programmer of 2 of game studio C2, I am currently working on a shadow play game, including writing core 3D graphics engine and designing gaming style.

Activity Type: Computer Technology  
Position/Leadership (50 characters): Co-founder and programmer of the game studio C2  
Participation grade levels: PG  
I intend to participate in college: Yes  
Timing of participation Year  
Hours per week: 40  
Weeks per year: 12  
Details, Honors, and Accomplishments (150 characters): Write core 3D engine and design gaming style for a shadow play game, combining traditional Chinese art of light and shade and modern game elements. (Where is co-founder)

Estimated: 40 hrs/week full-time job

After giving up the internship at Microsoft and Alibaba, I encountered Mike Luo, who had just graduated from Tsinghua and planned to start a game studio from scratch. Luo studied in the same high school as me, and has also participated in Olympiad in Informatics training, so I got to know him pretty early. And most importantly, he shares the great passion for game producing as me. So I kicked in, and we formed the studio C2 consisting of only 4 students, with 2 artists and 2 programmers. Despite the age gap between me and the other 3, who are all graduated students from college, there is not a single obstacle blocked in our way of communication. Passion and connections gathered us together.

So that day when I tugged my heavy suitcase back from Beijing in Chengdu, Luo welcomed me warmly. We walked across blocks and bridges, passing through lanes and alleys, and finally entered the rented 50 m2 apartment hidden in a dark corner. This one-bedroom, one-living-room apartment is our lovely studio. Though small in area, the studio is warm and friendly, and there is everything that we need: four PCs, one printer, one blackboard, and a bookshelf full of precious books varying from technological bibliography to traditional culture. Since I am the only one not living in Chengdu, I luckily earned the sole sofa for bedding in living room.

I might be proud of my programming skills among peers, but compared with Luo, I drop back to a beginner again. I knew game making was difficult, but it turns out to be much harder than I perceived. Various fields of knowledge are required: a good perception in art, profound understanding in calculus, linear algebra and spacial geometry, physics, history and culture, and of course, programming. Perhaps I might be scared before, but not this time, for this has been what I long for, and I have admirable and humble friends providing instructions around me. It feels just cool.

The first game that we plan to make uses shadow play as the main technique for story telling. One reason for this is that using shadow play in game is rather innovative. There are only three pivots in most shadow play figures, so it's easy to create interesting and smooth movements just by controlling these three pivots. Another reason for using shadow play is trying to save the endangered traditional Chinese art. The origin of shadow play is two thousand years from now, yet the effects are stunning. However, only a few number of old people are still mastering this ancient skill, because the younger generations are more obsessed with computers, phones, and have no interest in artifacts like shadow play. It is somewhat like a mission for us to record down the near-extinct Chinese art, by combining the old rendering style with the new 3D computer graphics techniques.

1. Being the sole builder of online community Cornucopians which dedicates in pulling segregated teenagers owing to physical deficiency out of solitude.

Activity Type: Other Club/Activity  
Position/Leadership (50 characters): Builder of non-profit community cornucopians.org  
Participation grade levels: PG  
I intend to participate in college: Yes  
Timing of participation Break  
Hours per week: ?  
Weeks per year: ?  
Details, Honors, and Accomplishments (150 characters): Inspired by a friend with severe disease, I built up cornucopians.org to gather injured teenagers together to fight with solitude via sharing.

Time spent: 40 hrs/week in first month carrying out the first version, and 5 hrs/week in maintaining.

Cornucopians.org roots in “cornucopia” which means abundance. Ivy told me the idea in June. She suffered a severe disease once and had to lie in hospital for months waiting to be cured. She said that the biggest challenge she came across was not the disease itself, but had to be split away from the colorful world with students and friends. That is, the solitude. So she started the notion to build a website to gather teenagers having the same trouble together, to establish a platform for communication and sharing life stories, and solving the problem of being alone ultimately. I was impressed after she told the story, so I came to help.

I had done building websites before, but this one was till difficult for me, for it is not merely a website for displaying information; it has to be a community with functions as those in facebook or twitter. And customers are a special group of people, teenagers segregated from outside world. Thus the user interface(UI) needs to be designed in a warm, welcoming way, which is somewhat beyond simply doing technical work.

Fortunately, there are many existing social network examples, so at least I knew which functions should I implemented. And to solve the UI problem, I also read articles on people's perception and how to master space, line and color to produce the expected effect. It was like making atom bomb in China in 1960s. You know the what final effect is, but not knowing the exact details inside.

After two weeks of hard work, I carried out a demo version of the website. It was like a mixture of different patches from other websites. Naturally, it looked ugly and the structure was awful to maintain(I always spent hours in debugging just for a tiny mistyping error). After deliberate decision making, I painfully removed the whole project and planned to start a new one from scratch. “Back to the origin” may seem stupid to discard previous work, but it turns out to be a wise choice as development proceeds. Now that I knew almost every possible obstacle this time, the process was much quicker. And I managed to find another friend to cooperate with me in the final stage of the development. Eventually, Cornucopians.org was released onto the Internet.

1. Teaching(assist teachers) junior students in high school Olympiad in Informatics, including giving lectures, making problem sets, and building an online judging system, as a way to show gratitude.

Activity Type: Academic  
Position/Leadership (50 characters): Manager,problem setter and lecturer of OI group  
Participation grade levels: 11, 12, PG  
I intend to participate in college: Yes  
Timing of participation School, Break  
Hours per week: 6  
Weeks per year: 40  
Details, Honors, and Accomplishments (150 characters): Training junior students who participate in Olympiad in Informatics(OI) in every single field, I learn gratitude and responsibility in the way of heritage.

Time spent: a total of 100 hrs in preparing problem set(more than 20 problem sets in total), 30 hrs in giving lectures, 8 hrs/day \* 2 weeks = 112 hrs in carrying out the online judge.

My high school has a tradition in training students in Olympiad in Informatics: senior students(one or two grades higher) volunteer to help junior students. And when previous senior students graduate and leave school, the new set of senior students take the relay. It is a way of heritage, and we learn more from students than from teachers. After I won the gold medal in National Olympiad in Informatics, I became the main charger of the following grades, and has contributed much time without paid in creating problem set and giving lectures, as a gratitude to the ones who had helped me along the way. Compared with making problems, lecturing is much simpler, since I just had to write a ppt and stand on stage for 2 classes each week in the training session. But creating brand-new problems is typically hard. Although there are only 3 problems in a set, for each one, I had to write problem description in Latex, generate test cases by hand or by self-written program, and write solution source code to the problem. The whole process usually took me a whole morning, if the problem set was not hard, or plus a whole afternoon if more difficult, not including the time spent in seeking for inspirations of how to create an interesting yet not old-fashioned problem. But I did enjoy helping these brilliant though sometime stupid students, who were like phantoms of myself years ago. And when they made some accomplishments and sit around, chatting about what they did right, how they solved the problem in a creative way, I was satisfied.

Last summer I built up an online judging system which helped to manage problems, hold regular contest, and grading for the convenience of teachers. I dedicated whole two weeks in putting together ideas, code segments, and made a demo. Later school showed great concern in this project and gave me a server to build the website. Now students can study Olympiad in Informatics more efficiently.(described more in last year's short answer)

1. Being a minister at high school's Science & Tech Association Network(Technique) Department, I lead over 10 students in maintaining student's website, solving technical problems from other departments, and organizing the most attracting section of Science Month every year – knowledge competition.

Activity Type: Student Govt./Politics  
Position/Leadership (50 characters): President of Tech Department  
Participation grade levels: 11  
I intend to participate in college: Yes  
Timing of participation School  
Hours per week: 3  
Weeks per year: 20  
Details, Honors, and Accomplishments (150 characters): I lead a group of students in maintaining student's website, solving technical problems from other departments, and organizing knowledge competition.

Time spent: 3 hrs/week \* 20 weeks

Students' lives are dull in Chinese high school. There are tons of homework to do everyday, plus pressures over grades and ranking coming from parents and teachers. Therefore, as members of Science & Tech Association, it is our mission to make life on campus a little more colorful. My department consists of over 10 students whose daily mission was to maintain a student's forum and solve technical problems in other departments. I mostly arranged regular meetings to report progress, assigned tasks to students with different specialities, and interviewed newcomers. During the session of Science Month, which is the most exciting activity open for all student each year, I led a group of three in organizing fun knowledge competition. Through weeks of preparation, we carried out a 20-page problem set as our off-site round for each class(the competitors were in the unit of class), which ranged in almost every subject with different levels, as well as some funny and weird questions. On the on-site round, I played the role of host and judge myself. Through the competition, I learned that it is hard to satisfy everyone's behalf. Conflicts had to appear, and when it came I had to find a eclectic solution, which might arise dissension to someone even it is “eclectic” to me. In the end, some competitors were still not font of my judgment, but no one can denied that the overall effect was a success.

1. Being as a volunteer for DaAiQingChen which is a prevailing non-profit organization in China whose goal is to save tens of millions of migrant workers suffering from an incurable disease normally known as dust lung, especially those working for coal companies. My responsibility is to make an English version of its website to gain help from benefactors over the world and to raise international attention on Chinese migrants' living conditions.

Activity Type: Other Club/Activity(No choice for charity?)  
Position/Leadership (50 characters): English website builder and translator  
Participation grade levels: PG  
I intend to participate in college: Yes  
Timing of participation Break  
Hours per week: ?  
Weeks per year: ?  
Details, Honors, and Accomplishments (150 characters): Translate and build website for an organization to raise international attention on millions of Chinese migrants suffering from dust lung.

Estimated: 5hrs/week

1. Taking part in ACM-ICPC(International Collegiate Programming Contest) which involves brainstorming and coordination to solve several real-life problems under pressure with 2 other students as an unofficial team(since it is for college students), we have fought in many districts in China and earned great results.

Activity Type: Academic  
Position/Leadership (50 characters): Leader, programmer and debugger of the ICPC team  
Participation grade levels: 10, 11, 12  
I intend to participate in college: Yes  
Timing of participation School, Break  
Hours per week: 5   
Weeks per year: 20  
Details, Honors, and Accomplishments (150 characters): Competing unofficially with college teams to solve real-life problems under pressure, I got a better understanding of team, trust and fun. (training progress on several college campus knowledge exchange, form group SilverBullet, progress > result)

Time spent: a total of 100 hrs (5hrs \* over 20 practices)

I have competed in many programming contests, whether national or international. One that I enjoy the most is definitely ACM-ICPC, because we fight as three, not just a battle of oneself. Company, trust, and fun are the three words I'd like to describe my feeling in ICPC. Last time, in Chengdu Regional Contest, we are the only group consists of high school students competing with over 100 best college teams in the China. We got a silver among college students, but was under our expectation. Below is my last year's commentary.

Last month, two friends and I took part in ACM-ICPC Chengdu Regional as unofficials.

Everything went on smoothly. We solved 4 problems when 1.5 hours left. Our next target was Problem C – a combinatory problem: How many ways are there to cut a wire into several pieces and fold each piece into a triangle, satisfying all triangles are integral and pair wise similar.

I noticed there had to be a basic triangle to construct the other. Thus, the problem could be divided into two parts: to count the number of triangles with a certain perimeter and to count the ways of writing x as a sum of integers. By multiplication principle, the final answer is the multiple of the two results. We made a quick tactic: I was responsible for the first half; Wayne was for the second half, while Leo had charge of finding contradictions.

The second half was proved to be pretty easy; at least they told me so. Therefore the pressure was crowded on me. The main obstacle was how to utilize the triangle inequality. After 30min, I gained a weird expression. Unsure of its correctness, Wayne tested some small cases.

Unfortunately, it was defective. Under great anxiety, I revised the formula over 3 times, but no luck. Eventually Wayne suggested a trivial flaw: (3,3,1) and (1,3,3) are the identical triangles but will be counted twice. Thank heaven, the program worked well after we fixed it. I quickly finished the other half of the program and started testing sample tests.

Compile. Run. Fail.

Just then, Leo pointed out a strong contradiction: simply multiplying results of two parts is faulty. They spent a long time explaining to me. But it was too late.

We were exhausted when contest was over, but still determined to fix our program. Later, we realized one more constriction would serve: the greatest common divisor of the numbers we get from partition should be one. A change of 10 lines would be enough. We went bananas at times like this. But deep down, this is just what we do for love.

1. Keep running 1500m everyday at night after class, and hold on to it for 2 years, I first influence buddies in dormitory, then aroused a class-wide fad, and finally motivated a great sum of students in the school.

Time spent: 20min/day \* 300 days = 100 hrs

Activity Type: Athletics: Club  
Position/Leadership (50 characters): Initiator of a running tradition at night  
Participation grade levels: 10, 11, 12  
I intend to participate in college: Yes  
Timing of participation School  
Hours per week: 2  
Weeks per year: 30  
Details, Honors, and Accomplishments (150 characters): Running 1500m on the track every night after class, I first influenced roommates, then classmates, and finally brought up a school-wide habit.

Running was never my hobby. On the contrary, I was always afraid of 1000m running test in junior school. On the first night when I entered high school, however, seeing the beautiful empty running track lit by fragmentary light, I wanted for a change, like every person wants to do something when starting a new beginning. I asked for another roommate of me for company, and we started running. I can still remember clearly that on the first day, our voyage was 3 laps, a total of 900m. At that time, when a student saw two guys running after class at night, he or she must think of them as a ephemeral passion or just want to show off. It was weird at first, even to myself. But I was not alone, and I just kept running. In the first week, we found 3 laps were too easy, so our target was set to 5 laps, and didn't change from then. In two weeks, 4 of my roommates were motivated and joined us. In fact, all my roommates were from different regions of Sichuan, but our relationships were quickly built and strengthened in this way. Sometimes we may discuss a certain math problem, or to listen to one's misfortune, or simply to enjoy immersing in the moonlight shadow. We may have different speed, different number of laps, but these problems never became concerns. It was we ran that mattered.

As time proceeded, I almost forgot the reason for running every night. Possibly for trying to be fit, or to have a relax after a day's work. It's like a ritual. And I saw more and more students, in my class or in my grade, or neither, went on track to jog or sprint. Occasionally when I was running, I would hear a encouragement from one I didn't recognize clearly beside the track, and a warm feeling would emerge in my heart. And in return, sometimes I would do the same. It felt good to be lost in darkness under stars, sprinting and sweating, with strangers and friends by side.

1. Being director & tech support of school's drama group, I enjoyed taking part in acting, organizing, and providing stunning sound and visual effects in backstage.

Time spent: 8 hrs/week \* 4 weeks

Activity Type: Theater/Drama  
Position/Leadership (50 characters): Director and the main Tech support of school's drama group   
Participation grade levels: 9  
I intend to participate in college: Yes  
Timing of participation School  
Hours per week: 8  
Weeks per year: 4  
Details, Honors, and Accomplishments (150 characters): I directed and produced Macbeth with stunning sound and visual effects, winning our school's Best Play of the Year.

1. Gaining the offers for internship at Microsoft Research Asia in groups of Machine Learning and Visual Computing, and the offer from Alibaba in Data Mining, I am the first student with a high school diploma having managed to succeed through process of applying, self recommending and interviewing.

Activity Type: ?  
Position/Leadership (50 characters):?  
Participation grade levels: ?  
I intend to participate in college:?  
Timing of participation?  
Hours per week: ?  
Weeks per year: ?  
Details, Honors, and Accomplishments (150 characters):?

Time spent: ??(don't know how to write)

I always wanted to intern at a company like Microsoft, to see how to link science & tech with reality. So this summer, after I determined to take on a gap year, I tried sending emails to multiple IT corporations to explain my condition, what I was capable of. Normally, intern positions are for elder undergraduates and graduates who had solid foundation in elementary science and computer science. But I knew I was proficient in some fields and had strong learning ability, so I decided to give it a shot. Some companies directly rejected me, saying I'm not eligible owing to age restriction. But MSRA and Alibaba showed great interest on me and we made some contacts. I also did several interviews in the phone, all turned out to be very successful. I was really excited to know that I got in, but there were some worries lingering in my mind. Was it really the way full of excitement and freshness as I imagined?

So I decided to pay a visit. Standing in front of the enormous Microsoft building in Zhongguancun, I felt how tiny I was. Jianwen, the researcher in Machine Learning group and the would-be instructor for me if I accepted the offer, welcomed me and led me in. The office on the 14th floor was big and beautiful, and everything was sorted in a clean, yet modern manner. But I felt something was amiss. Later, Jianwen told me how internship at Machine Learning would be going. That was, 3 months in learning basic knowledge, and after that, following instructor in doing a specific type of research. Doing research means you have to dig into a narrow field of study really deeply, and only then can you contribute a little. However, this was not I wanted. In fact, the starting point for me to do internship was to see the connection between theory and practice, to learn more different things on a broader range, rather than constrained myself in a cage doing research all the day. So in the end, I thanked the researcher's courtesy, and told him my worries. Although I gave up the internships at last, through this process of trying totally on my own, which hadn't done by any high schoolers before, I was glad to see my road more clearly.

1. Volunteering at local Yanwu Road Community Service, I had a job of sweeping floors and cleaning ads from walls.

Time spent: 1hr/week \* 12 weeks

Activity Type: Community Service(Volunteered)  
Position/Leadership (50 characters): Cleaner of floors and walls  
Participation grade levels: 10  
I intend to participate in college: Yes  
Timing of participation Break  
Hours per week: 1  
Weeks per year: 12  
Details, Honors, and Accomplishments (150 characters): Experiencing the life of a bottom cleaner, I understand every job is not easy and we should be satisfied of what we have.

1. Activity Type: Academic  
   Position/Leadership (50 characters): top-level competitor of programming website Codeforces  
   Participation grade levels: 10, 11, 12  
   I intend to participate in college: Yes  
   Timing of participation: School, Break  
   Hours per week: 5  
   Weeks per year: 10  
   Details, Honors, and Accomplishments (150 characters): Participating for years, I became red coder and won a fully covered 5-day pilgrimage to St. Petersburg to meet best sports programmers around world. (to get into contact and compete with best programmers around the world)
2. Activity Type: Family Responsibility  
   Position/Leadership (50 characters): member of my family hiking group   
   Participation grade levels: 9, 10, 11, 12, PG  
   I intend to participate in college: No  
   Timing of participation: Break  
   Hours per week: 8  
   Weeks per year: 12  
   Details, Honors, and Accomplishments (150 characters): My parents and I went climbing monthly since I was 6. Before, I was sick of climbing, and needed carrying. Now I take the lead and help them through.