

## **Personal Statement**

### **Applied Program: Wireless Telecommunications**

On August 27, 2002, at the Central Institute of the Datang Telecom Technology and Industry Group based in Beijing, a young woman, full of energy and self-confidence, was giving a presentation entitled "The Design of the Switching Numerical Method of the Radio Resource Management (RRM) Strategy in TD-SCDMA, and the Testing of Its Simulated Systems," which received rapt attention and high remarks from all the experts in Computer and Telecommunications who attended the meeting. That woman was I. At present, TD-SCDMA, W-CDMA, and CDMA 2000 are considered the main technological standards in the third generation of the world's technological development in mobile telecommunications. And the design of a switching computation method for the RRM Strategy is a key element and technological crux for the TD-SCDMA technology. In retrospection, I found that it was my great enthusiasm for mobile telecommunications, and my persistent pursuit of accuracy and perfection that have helped me win accolades from colleagues and experts.

In China, since the TD-SCDMA uses a smart antenna, it makes a demand for a finer research on the computation method for the RRM Strategy, in areas such as PC, DCA, and HC. To me, a new starter in the company, it was a real challenge. Since the research team was new, it lacked engineering data and practical experience, although the equipment of the lab was quite advanced. It was only after much library research, thinking, and consultation with experts did I find a RRM computation method suitable for a smart antenna. Because a smart antenna has its advantages of a more accurate VE locating and reduced searching areas, this computation method effectively lowers the complexity of the switching process and its failure rate. During the time when I worked for the project, I often stayed up several days in a row to perfect a lab test. But I also derived an enormous sense of satisfaction and fulfillment after overcoming obstacles, which more than compensated the pains and difficulties that I had to go through.

The rapid development of mobile telecommunication technology places a high demand on professionals working in this field. To a certain extent, it has to be a labor of love. My keen interest in mobile telecommunications emanated from the concept of "personal communication." During my undergraduate years at the Northwest University of Industry, I spent much of my spare time browsing over professional publications and journals, to keep myself abreast of current developments. The concept of "personal communication" I encountered during this process impressed me immensely. A system of "personal communication" is one that allows the user to communicate at anytime, anyplace, to anyone, and in any way. It painted such a beautiful picture of a future society that I became fully convinced that it is a subject well worth my lifelong pursuit. This was why I chose Mobile Telecommunications as my area of specialization in the graduate program. As a graduate student, I completed several research projects independently and successfully, including, for instance, "Turbo Code and the Application of Its Coding Concept." In short frame conditions, the Turbo Code, with its improved application in engineering, seems to have a bright future in real-time voice-data service (Please see the attached article). After completing my graduate degree, I entered Datang Group, a pioneer in China's software development. Here I did software design for the switch control template used at the RNC equipment for the TD-SCDMA system, and developed a switching computation method for the RRM Strategy. I went through the entire process of software design for the switch control template for the RNC equipment, from topic analysis to the project outline and then to actual program writing.

The present development of telecommunication technology indicates that the smart antenna, software radio, and the transmission technology of subline 下行 high-speed subdivided exchange data (下行高速分组交换数据传输技术) are key technologies for today's mobile telecommunications. Software radio, in particular, has attracted much public attention. The use of DSP and software to solve the problem of wireless interfaces of diverse standards on a public hardware platform has become a major issue pursued by many professionals in our field. I too hope to make my own contribution to the technological development in this area. In the next few years, the traditional concept of using

chips to build wireless equipment for mobile telecommunication will be seriously challenged. In recent years, the technologies and standards of the third generation of mobile telecommunication have been rapidly updated. Software radio, I believe, will be the future of our trade.

My desire to know more about computer engineering prompted me to rise above my present conditions. The United States, as technological superpower, have first-rate teaching faculty and research facilities in the world. Its ideological openness and tolerance make a sharp contrast to Chinese culture, which tends to value tradition rather than innovation. Wireless telecommunication may be said to be one of the newest research areas, and it is new concepts and new vision that give life to the industry. I believe that in the fine research environment in the United States, I will be able to make “shortcuts” in attaining my academic and career goals.

I would like to apply for admission to the Center for Wireless Telecommunications of Virginia Polytechnic Institute and State University. As the most prestigious research institute in Wireless Telecommunications, the Center has a large number of famed scholars and professionals dedicated to the theoretic research of Wireless Telecommunications. Meanwhile, it maintains close contact with the telecommunication industry, and in this way can test the theory in practical experimentation, which in turn promotes theoretic research. It is an ideal place for me to fully develop my research potential.

I look forward to finding a teaching position at college level in China after completing my graduate education, which will allow me to continue my research work in Wireless Telecommunications. I will impart my theoretic and practical knowledge to my students, and hope that this will benefit China's wireless telecommunication industry, and society at large. I will make every effort to make the idea of “personal communication” a reality.

留学个人陈述范文(自动化专业)

**Personal Statement**

**I have a lot of dreams.**

**If we dream, everything will be possible.**

In retrospect, I have much to be proud of. As a 10-year-old teenager, I was already obsessed of painting the concrete forms of my dreams with the brush in my hand. At such a young age, I had already learned the necessity to practice painting deep into the night in order to achieve constant improvement in the sophistication of my brushwork. My endowments and my dedication helped me secure three major prizes at international adolescent fine art competitions. My substantial progress in practicing fine art also opened the door to developing my perceptive horizon and to tapping my tremendous potential. As a result, I handled my studies with much facility, especially in mathematics for which I had a particular penchant. No matter how difficult the courses in my high school were, I could almost invariably achieve full marks in all of them. Apart from virtually perfect performance in the scholastic aptitudes at my school, I achieved remarkable scores in a variety of national contests for high school students in mathematics, physics, and chemistry. Those distinguished achievements resulted in my being enrolled by Tsinghua University, exempted from entrance examination. In China, this could properly be deemed the highest honor that a high school student could possibly attain. On the way to the realization of your dreams, there is no substitute for hard work

Teamwork fulfill your dreams easily

Upon entering this most prestigious university in China, which is Tsinghua University, in my usual spirit of dedication and perseverance, I once again embarked on my journey of industrious study in the Department of Automation. My exceptionally solid foundation in mathematics provided me with a stepping stone with which I proceeded onto the exploration of other sophisticated and erudite subjects. As a freshman, I taught myself such mathematics courses as Real Analysis and Advanced Numerical Analysis that are only scheduled for senior students. My performance in all the specialty-related coursework not only enabled me to secure the second highest GPA ranking in my class but also furnished me with a powerful instrument whereby to materialize my dreams in the research and development of computer and network technology.

In the scorching summer of 1999, with an entrepreneurial passion that was much more vehement than the scorching sun, two classmates and I commenced to establish our own business and to operate our own company. By any imagination, it was a challenging undertaking. We focused on the development of online multimedia entertainment platform and on the research and development of virtual reality (VR) technology. In the process of developing the software for the VR products, we encountered the major obstacle of how to realize globular equation of the pictures actually taken of the real objects.

Under my organization and leadership, the task team, which consisted of a number of senior undergraduates and graduates, consulted a huge amount of technical literature, solicited professional guidance from specialists in the field, conducted surveys and interviews, analyzed feedbacks, and wrote business proposals. It was common for me to sleep only four hours a day. We worked under the conviction that, even if we failed 99 times, we would be ultimately victorious if we could succeed in the 100th trial. Any notion of defeatism would cause one to relinquish and end up in eternal failure.

Within two months, we eventually succeeded in developing the semispheric equation algorithm whose effect could perfectly parallel the globular equation algorithm of the software. In autumn, the season of harvest, we won the Prize for Excellent Original Conceptualization at the annual Entrepreneurial Competition with the business proposal based on this project. In the meantime, we succeeded in attracting a risk, investment worth 5 million RMB (approximately 600000 US dollars). The immediate infusion of the cash into our company guaranteed the overall inauguration of our company.

In the initial stage of establishing our business, we foresaw that the VR technology would make tremendous headway in the future network application. The problem we faced at that time was the limited bandwidth of the network, which in turn circumscribed the development of VR technology. After nearly one-year development, our technology has become increasingly mature. Furthermore, our collaboration with Britains Rotography Company has acquainted us with some refreshingly constructive concepts. With the continued improvement of the Chinas domestic network environment, we have formally initiated serial services to our clients in the application of VR

technology. In this process, our companys website for supplying technical service [www.senex.net](http://www.senex.net) was consummated. So far, many manufacturers availed themselves of our VC solutions, including Beijing Garment Manufacturing Factory, the largest of its kind in Beijing. Meanwhile, I participated in a seminar on the development of network virtual passage VPN project jointly undertaken by Zhejiang University and NingPo Golden Leave Information Technology Company. By conducting a survey of U.S. VPN market and by studying VPN technology, I presented some unique insights of my own at the seminar, which were positively evaluated by computer specialists from Zhejiang University.

With our products started to increase the market share, the reputation of our company became increasingly widespread. As a burgeoning company, we managed, through fierce bidding, to secure a project of Demonstration System from Sony Company. Though finally the project did not take long to complete, the success of winning the first project through tender excited the whole group of young entrepreneurs. At present, in reaction to the strong demands for information concerning rubber market by more than 20000 manufacturers and related enterprises, our company is cooperating with Reuter Agency and Information Headquarter of China National Rubber Industry in developing and designing China Rubber Business Website, which aims at providing the most updated global rubber information for domestic rubber manufacturers and ultimately realizing the B2B business platform for Chinas rubber industry. This is a newly-emerging field which integrates conventional industry with IT industry, thus requiring rich professional knowledge and experience in conventional sector as well as powerful and comprehensive analytical and problem-solving capability. Under such circumstances, I am forced to augment my knowledge in a totally strange profession within the shortest possible time. But I know that with, my usual confidence, I will surmount this challenge.

If we can dream it, we can do it.

The future belongs to those who believe in the beauty of their dreams.

Now I have a dream to become a well-trained engineer so that I can enjoy myself in the field of technology application as well as in the field of theoretical research. Furthermore, I love the feeling of being challenged. Only by plunging oneself into a challenging environment will one be able to keep on scaling new

heights. For me, this challenging environment that fascinates me most is Harvard University, the ideal university to undertake my Ph.D. program.

In my prospective degree program, I would like to concentrate on the following fields: (a) VLSI & Microelectronics; (b) Systems and Control; (c) Robotics and Computer Vision; (d) Communications & Signal Processing; (e) Operations Research & Systems.

I am convinced that the advanced training in your established graduate program will help develop me into a successful professional in my chosen field. In the highly challenging academic environment of Harvard, I will rely on two effective strategies that I have consistently employed in my heretofore studies and business operations: competition and cooperation. I can imagine that, with the international perspective and professional expertise developed at Harvard University, I will be best assisted in bringing my tremendous potential into full play in my future efforts to blaze new trails in the virtually unlimited future world.

留学个人陈述范文(计算机专业)

### **Computer Science Personal Statement**

My motivation to study computer science extends further than my basic interest in technology. For me computing, both innovative and exciting, is a profession offering unlimited boundaries.

Computing changed from being more than a hobby when I started at DLD College in 1996. DLD was the first educational establishment I had attended that offered a full-time Computing course, enabling me to take this A-Level a year early in 1997. The principal invited me to head a specialist computer course for some staff members and pupils, which I found rewarding and proved very successful. Other activities I participated in at the college included being a founder member of the student committee, editor of the student newspaper and goalkeeper for the 1sts.

Outside of college, I created centralperk.com, a website dedicated to the Friends TV show which received over 500,000 visitors per month. The popularity of the site earned me a place in the 1997 UK Web awards held at BAFTA in London. It was at the awards that I was approached by Online Magic,



the UK's leading web agency, and started to work for them during breaks from college. Through this, I gained extremely valuable commercial exposure to clients such as British Airways, Economist, Channel 4 and Decca Records.

In 1997 I embarked on building an online sign language tutorial, called SignHear, as part of the ThinkQuest Internet Challenge. The site provided 200 basic signs and the alphabet. To date, the site has received over 2 million visitors and its success was officially recognized in 1999 by the judges at ThinkQuest. Along with teammates from the UK and USA, I was invited to the award ceremony in Los Angeles and presented with a \$20,000 prize by Marlee Matlin, an Oscar winning hearing-impaired actress. It was an uplifting experience for me to witness the life enhancing contribution that technology can make.

With the fast pace at which the Internet and surrounding technologies were developing during 1998, I decided to take a gap year in industry before starting a Computer Science course at university. My gap year began when I commenced full-time employment with Online Magic, which continued until October 1998. I was then headhunted by Traxdata and joined their team as an Information Architect.

Despite my age and lack of commercial experience, within a year of joining Traxdata I was promoted to Head of IT/Internet for their European operations. This meant responsibility for a network with over 300 users across 5 countries as well as directly managing five members of staff. Other responsibilities included running our live, in-house Internet servers that coped with over 250,000 visitors per month and supporting the marketing team with custom CD-ROMs, presentations and field demonstrations. At Traxdata my gap year turned into four amazing years that gave me the opportunity to travel and work in countries across three different continents. I also gained invaluable experience on both technological and human levels.

On a lighter note, I recently created my own online diary, [inkiboo.com](http://inkiboo.com), which so far has had over 11,000 visitors from all over the world. I am also a sound engineer/manager for a rock band consisting of students from both Imperial College and UCL. These close friends were also a great comfort and support to me when my mother died from cancer in March last year. This started my



involvement with the local division of the Macmillan Nurses where I help with computer training and support.

Although I would not have passed on the last four years, I now realize the value that a degree affords in underpinning the foundations of computer technology. I believe I have grown in both confidence and maturity and if given the opportunity of a place at university, I will be fully committed to successfully completing a degree course.

留学个人陈述范文(机械工程专业)

## **Personal Statement**

### **Applied Program: Mechanical Engineering**

In China there is an old custom called one-year anniversary fortune-telling: by the time the new born is one year old, its family prepares a lot of objects of different shapes and functions for it to choose from. The first object that attracts its eyes and hands is supposed to be a symbol of the baby's future career. Unscientific as it is, it truly predicted my profession and future. At that time the toy car in my hand greatly aroused my wonder at the wheeled monster. As I grew up, I was no longer satisfied with collecting car pictures and making car models. I was determined to be an expert in automobile design and manufacturing. As it turned out, the specialized education I have received in both my undergraduate and graduate programs have fully equipped me for undertaking more ambitious academic tasks in the field of mechanical control.

I know I am no genius and I also know that success is to result from extraordinary efforts. I chose as my starting point Beijing Institute of Technology, one of the 3 universities in China that majored in automobile research. There besides the specialty and theory studies, I made use of my free time to read large quantities of references both in Chinese and English, to catch up with the latest development in theory and to be immersed in the widest range of information. As a graduate, my academic performance had always ranked No.1 in my class, especially for the 20 also specialty courses in the junior and senior years, among which Automotive Manufacturing got full scores. For 4 years I got the first or the second class scholarships consecutively and was awarded many honors such as Outstanding Student,

Outstanding Cadre, as well as appraised by the department leader as the best student in the recent 5 years.

The strong interests in automobile forever stimulated my enthusiasm in study and motivated me to equip myself with specialty knowledge to the greatest possible extent. Apart from the study task, I also served as teaching assistant in the course of vehicle electronic technology. As a post graduate and with the specialty knowledge getting more and more profound, I worked as a research assistant in the laboratory and came to better my ability to apply theory into practice, thus capable of carrying out scientific research activities independently. Meanwhile I took part in many research and development projects and accumulated rich experiences on that. In the joint-venture project between our school and the first automobile manufacturing plant in China, I was responsible for building up experimental framework composed of the electric motor, hydrostatic gearbox, loading device and the control system and carried out the functional adjusting of the automatic shift, thus getting a better knowledge of the power train. The experiment was a great success and provided reliable support for the overall vehicle experiment.

The thesis for my master degree is Research of Loader with Automatic Shift Technology and Fuzzy Control Strategy. At present, China's research on automation of construction machinery has not started yet. I choose this subject in order to realize automatic shift control and computerization of construction machinery. It is mainly concerned with coordination control of the engine and the gearbox, power distribution, recognition and fuzzy control of the working state of construction machinery and so on. This is based on the joint venture----the automatic shift control of ZL50 loader between our school and a gearbox manufacturing plant in Hunan. The purpose of this research project is to change the loader's original manual shift into automatic shift control. The stumbling blocks here are the recognition of different working states, the coordination of the engine and the gearbox and the realization of the potential engine power to the greatest possible extent.

In that project I was responsible for the whole process from the project demonstration, program selection, simulation research and project implementation. We largely enhanced the automation level and working efficiency of ZL50 loader and made convenient its operation. At the same time

I benefited a lot from a deeper understanding of the essence of automatic shift techniques. Apart from the completion of my graduation thesis and based on the experimental statistics and the project's early stage work summary, I published, on the national central periodical named Construction Machinery, a paper titled Research on the Mechanical Parts of Electronically Controlled Automatic Shift on ZL50 Loader and also another paper, on Construction Machinery and Equipment, titled Research of ZL50 Loader with Electronic Controlled Automatic Shift System, which has the project outcome as its theoretic basis. They were highly praised by experts in this field for their values in academic research and of creativity. Because of the need to collect large quantities of experimental data for possible future renovation reference, I independently developed a set of data collecting soft ware, with the transmitter soft ware written in C language and the receiver soft ware written in VC++, communication between the two through series connections. This soft ware was highly usable throughout the whole experiment and greatly increased my work efficiency.

Automobile industry is the main industry for a country. It started very late in China and lags far behind the advanced countries such as the United States, Germany, Canada and others, its competency comparatively low. To shorten the distance, it is necessary to go abroad and learn from the developed countries the advanced automobile manufacturing technology and for that reason it is also urgent to perfect my knowledge structure and enhance my specialty level. The specialty of mechanical engineering in University of Michigan ranked No. 11 in the United States. It has rich technical resources and its research centers and laboratories are proud of state-of-the-art equipments. The research work of Vehicle Power train Dynamics and Control being carried out there by many famous professors well fits into my postgraduate research work. So I wish to continue my education in your university. A scrutiny of my educational background and of the research projects that I have performed will indicate that I have a solid foundation in mechanical control. Therefore, my knowledge and specialized trainings in mechanical control will also enable me to prove competent in control-related programs. If my qualifications suit me also for a program in mechanical control, do not hesitate to transfer me to such program because I am equally interested

in those programs. My study plan is to learn the fundamental knowledge first and then, based on my own research background, decide on a research direction that will best facilitate the development of China's automobile industry. In this way I will try to work out valuable academic achievements and write high-level doctorate thesis. Eventually I will return to China to contribute my learning to the development of automobile industry in my fatherland and thus realize the dreams of my childhood

#### **SAMPLE STATEMENT OF PURPOSE - ELECTRICAL ENGINEERING EXAMPLE ESSAY**

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My decision to pursue graduate study in the United States is underscored by my desire to be a part of the graduate program at your institution. Purdue University offers the flexibility needed for such a vast and rapidly changing field. The research facilities and the faculty at the university are par excellent.

[review para1](#)

Communications is an industry that has changed our lives. In a very short period it has changed the way we have looked at things since centuries. It is one industry that is going to shape our future for centuries to come. Hence my desire to do

masters in electrical engineering with communications as my major.

[review para2](#)

My interest in electronics blossomed during my high school years. It was the time when technology had begun to make an impact on the lives of people in India. Hence engineering with electronics as my major was the first choice for my undergraduate studies. Right since the beginning of my undergraduate study electronics is a subject that has fascinated me with its power of applications. The subjects that I have studied include Linear Electronics, Digital Electronics. These laid the foundation for my courses in Electronic Communication & Communication Systems at a later stage. My undergraduate studies already focus on the communications aspect of electronics. A masters degree in electrical engineering with communications as major field is the next logical step.

[review para3](#)

For the past four months I have been working as a project trainee at the Indian Institute for Advanced Electronics. I am working on the design and development of a "PC Controlled Digital Serial Data Generator". This short stint has given me invaluable practical experience. It has given me the confidence to pursue a masters degree and also kindled a desire to do research.

[review para4](#)

During the course of my work at IIAE, I have come across several scientists. Most of them work in different areas of communications. Interactions with them have made me realize the vastness and the scope of communications. My discussions with them convinced me that specializing in communications will suit me very well.

[review para5](#)

The subject of research which interests me very much is spread spectrum communication systems. Coding theory and

combinations is another research subject which arouses my curiosity. The subject Communication Theory which I am studying at present introduces these topics in theory. I am eager to find out more about the applications of coding theory to spread spectrum communication systems.

[review para6](#)

In addition I have been a student member of the IEEE (Institute of Electrical and Electronics Engineers, Inc.) for the past three years. Through its workshops/seminars and publications like the 'The Spectrum' it has exposed me to a lot of emerging technologies in the field of communications.

[review para7](#)

It is a strong belief in my family that the American education system has the best to offer in the whole world. This belief arises out of the experience that my parents had when they did their Masters of Science in the University of Pennsylvania during the years 1967-69. If I can get an opportunity to be a part of that intellectually stimulating environment, I am sure my talents will be put to optimal use.

[review para8](#)



India is a developing country with an enormous potential in the information technology business. To serve the needs of this developing industry and more important its vast population, communications is going to become of utmost importance. Thus conditions here are very conducive to supplement my aspirations when I return after completing my graduate studies

### **College Admission Essay**

I am not the people and places I grew up with. This is the lesson two years of college has taught me, and it has taken me until now to do something about it.

**The idea of living in a new environment always enticed me.**

When I was younger, I used to picture what life would be like as a sophisticated New York City professional. I imagined myself bustling through the streets of Manhattan, business suit-clad, on my way to meet with a client. That

was as far as the fantasy went, but I've always thought there was something more to my childhood musings, a morsel of real ambition. I wanted to be independent, to be busy, to be relied upon by others. Currently I am studying business at the University of Southern California. Although I still have many of the same goals I had as a child, my experience feels somehow incomplete. I can't help but feel that I am stuck in that murky place between where dreams are conceived and dreams are realized. Let me explain:

My dad remarried when I was sixteen. Up until that point, I had always enjoyed having him to myself in a . One time when I was four years old, he came home from work looking worn out. "Daddy, come here," I said, beckoning him with my small hand. I placed my palm on his forehead and saw that it was hot. "You have a temperature," I announced. "Time for bed." When he told me that it was only seven o'clock, I started whining until he finally humored me, lying down in bed and pretending to sleep. That experience typified my relationship with him: although he was the dad, I loved taking on the parental role.

When I was fifteen, my stepmother moved in. That's when everything changed. She and my dad spent most nights together, , leaving very little time for me. I suddenly sensed that he no longer needed me, and that all of my control was slipping away. The situation left me feeling heartbroken; but more than that, I was confused about [llc operating agreement](#). If dad didn't need me anymore, then who was I supposed to nurture?

The resulting emotional instability continued into college application time. My decision to attend USC was heavily influenced by a resistance towards change. Los Angeles was the only city I ever knew. My very identity was tied to it. If I left, I would have no hope of regaining the control I had lost when my stepmother moved in. As a result, I could hardly entertain my childhood fancy of coming to a school like NYU.

It took two years for me to finally understand about : rather than clinging to a childhood I can never re-create, I should have taken a chance on the future that I've always envisioned.

Spending the next two years at NYU would help me to distinguish myself as an individual. I love New York's fast-paced, energetic ambiance. It is the perfect complement to the education I am seeking, for it would enhance my sense of independence and security. My grandmother attended NYU and took with her an experience that has guided her through life. I hope to be able to do the same.

NYU's student life and educational programs are the most fascinating to me. The school seems particularly well-suited to motivated individuals who are driven to secure their own success. I also look forward to partaking in NYU's special interest groups, especially in the realm of Jewish life. Most importantly, I have heard excellent things about the Economics major in the College of Arts and Sciences, and am enthusiastic about studying with many of the well-known professors who teach there.

With a restless spirit and a fierce eagerness to learn, I believe I would be a great asset to NYU's student body. If accepted, I plan to pursue my education with a new kind of

passion, one that becomes stronger for me every day: the passion for independence.

The first program used to test the setup should be very simple and test every LED in the array. Figure 5 shows an example program that demonstrates how to turn on every LED in the matrix, changing which color LEDs are lit at even intervals. Note the infinite while loop, since we just want the microcontroller to run this routine for as long as it is powered up. This section of code would appear in the `main()` of your C source file. The only other code that would be necessary would be the `#include` libraries for your specific microcontroller and whatever lines of initialization may be required depending on the application. The code is extremely simple, with the main 'for' loop simply iterating down the rows of the matrix while simultaneously updating the column data on the Ports of the microcontroller. The delay in between each

row must be calibrated depending on the speed of the microcontroller being used.

The target value is to use the longest delay possible without being able to see any flickering of the LEDs. The delay is desired to ensure that the LEDs are getting enough current each time to achieve full brightness. The counter variable outside of the for loop allows states to change according to the length of the duration variable.