**Applied Program: Photonic System Comminication**

I firmly believe in the motto "No pains, no gains", particularly when I was admitted to Beijing University of Posts and Telecommunications (BUPT) with outstanding academic performance in the college entrance examination. Once studying in such a prestigious university as enjoys a high reputation both in Chinese and Asian telecommunications circles, I am fully aware that I have to redouble my efforts so as to sustain excellence in this potent and superb team and get myself somewhere in the field of telecommunications with sustainable and rapid development. I am fully convinced that my intense interest and love in telecommunications are bound to fill me with inexhaustible confidence and enterprise.

Greatly influenced by my parents who are senior engineers in the Bureau of Posts and Telecommunications, I have developed a fine sense of perception since I was a small kid, which in turn enabled me to promptly master all the professional skills in my college studies. Not only have I successfully completed all the required courses offered in the specialty of Electromechanical Engineering, but also I have taken the core courses in the subsidiary specialty of Telecommunication Engineering. My remarkable academic achievements have laid a solid foundation for my further development in this field. Among the 20 specialized courses, I have compiled the highest grade in nine of them, ranking the top one in our department as far as the comprehensive ability is concerned. My excellent academic performance won me the rare privilege to be awarded the SONY Scholarship which was granted to only 100 excellent students in all the universities and colleges in Beijing by Beijing Education Commission. In addition, I received the first prize in the English Speech Contest held by our University and a second prize of Beijing area in the 1998 SONY Cup National Collegians' Electronic Design Competition with my design works of electronic scoreboard. My excellent performance in this competition won me a golden opportunity to visit the Bell Telecommunication Technology Co, Ltd (Shanghai) as a representative of all the excellent students in BUPT. Luckily enough, I was the sole chosen student in our department to join the research and development team on the project of Making Home-made Traditional Equipment of 2.5G SDH Optical Telecommunications in the State 863 Program.

In 1999, with the joint efforts of the Ministry of Information Industry, Putian Information Industry Group, and Great Dragon Telecommunications Group, this project won the first prize of National Scientific and Technological Progress, which is a symbol of the highest honor received in the telecommunication circle. Under the supervision of a senior engineer from the Great Dragon Company, I took up the task to research and develop the 34Mb/s Tributary Card. Finally I succeeded in getting four 34Mb/s signals to map into the STM-1 and solved this touchy problem. Traditionally, only three 34Mb/s signals were accessible to STM-1 with the SDH mapping route according to the ITO-T proposal. The bandwidth-carrying utilization ratio in the transmission system of optical telecommunications has thus been greatly enhanced due to this achievement. This card has already been applied to Hunan Photoelectric and Optical Fiber Telecommunication Network and passed the network entry test of telecommunications conducted by the Ministry of Information Industry in China. My bachelor paper based on this project was also included in collected excellent papers in our university. Apart from that, I was highly appraised as the most outstanding student in our grade by Prof. Li Yingyong, dean of our department, when he awarded prizes to me at the graduation ceremony.

After my graduation, I became a member of the Hutchison Optel Technology Co, Ltd, taking charge of the development and research tasks of designing optical module, line interface card, switch and cross-connection card, and part of the multi-wavelength optical system in the DWDM. During this process, on behalf of our company, I frequently participated in the training and exchanging activities organized by the American Agere Company and the Canadian PMC Company and held at Beijing and Shanghai. This training activity is concerned with the systematic application of SONET optical telecommunication chips, the prospects and development of its most advanced technologies in SDH/SONET/DWDM optical telecommunications. By virtue of the accumulated experience and my outstanding performance in my job, I was appointed as the head of the Switch and Cross-connect Group in the Intelligent Multi-service Transmission Platform (IMTP) project, which is a constituent of the "2001 State Program of Key Technological Innovation Projects'. Though my team members have reached a higher level of learning with M.B or doctorate degrees, I am fully confident in bring out their potentials into full play, cooperating and coordinating with each other, in the hope that I could make it a team of great competitiveness and resourceful potentials to carry out the system application work. Since the Canadian Nortel Company showed keen interest in our IMTP project, I went to Hong Kong to take part in a technological exchange activity conducted between Nortel and Hutchison Optel Company on the IMTP project. Meanwhile, I exchanged views with those technical personnel in the Northern Asian and Chinese sector of Nortel on a series of hot topics in the field of telecommunications, such as an intelligent optical transmission system with multi-service access, SDH/SONET technologies, and WDM technology all rolled into one.

The trip to Hong Kong really set me thinking. By far, almost all the telecommunication technologies used in China have been initially invented and then applied widely in foreign countries. The genuine intellectual property rights in our possession can be easily counted. The severe lack of telecommunication talents is the major cause to our present backward situation in technological development. In view of it, we have to follow the steps of those highly advanced technologies abroad, and then transform them into our own power and strength to develop our domestic technologies. The development of China's telecommunication industry urgently calls for a group of young people to study abroad, to master the world's most sophisticated technologies, and make their due contributions to facilitate China's telecommunication industry upon completing their degree programs and returning back. I am determined to devote myself to the telecommunication field and be a useful talent.

At present, the optical wireless telecommunication technologies are gaining rapid development and great momentum, and new changes are constantly brought about in the filed of telecommunication transmission. Under such a favorable environment, I am eager to be admitted into Cambridge University which enjoys a high and long reputation. The valuable instructions and supervision by the world's most accomplished scientists will make it possible for me to explore further in research subjects such as optical telecommunication system, telecommunication transmission network, broadband and optical wireless telecommunication. All these researches will be of great significance to the building of telecommunication industry in China. My ultimate objective is to acquire the most advanced technologies in the world and become an accomplished expert in this field.

Though the long road to study abroad is not always paved with flowers, I am fully convinced that the time when I have toiled and sweated in order to realize my dreams, I am bound to acquire a rich possession of knowledge which can be enjoyed for a lifelong time. Only by doing so can I devote my whole life to the telecommunication industry in China; only by doing so can our youth be lived meaningfully and worthwhile; only by doing so can we reach an even higher level of sublimation with our remarkable achievements.

**Letter of Recommendation (1)**

**Dear Colleagues:**  
  
As Dean and President of Academic Committee of Mechanical and Electronic Engineering Department in Beijing University of Posts and Telecommunications, which enjoys high reputation in Asian telecommunication field, I am very pleased in recommending Mr. Gregory Tang to study in your renowned university.

I was his teacher of the compulsory course of encoding and data processing and the director of his graduation thesis. And we also had very close contact when he was the chief editor of our departmental newspaper, so I knew him quite well about his academic performance and personal character.

In my course of encoding and data processing, he revealed keen appetite for knowledge by his attentive and active class participation. His well-founded mastery of the course supported by his solid mathematics background won him the first place in the class with the term final score of 96, topping all of his fellow students. His remarkable performance in this course had given me very deep impression.

Mr. Gregory Tang is well known in the department for his diligence and perseverance in study and researches. When he was taking part in SONY Cup National University and College Students Electronic Design Competition, I could always find him doing experiments in the lab, even late at night. And the AI Electric Scoreboard System designed by his team finally won the 2nd prize after intense competition with electronic aces from every corner of this country.

In November 1999, the appraisal team decided to recommend Mr. Gregory Tang to be enrolled as graduate students with exemption of entrance exams. But at last because of his personal pursuit and plan of development, he abandoned this recommendation. I respected his choice of personal orientation though I felt his refusal of this offer a pity. Before his graduation, he mentioned to me in a conversation that he planned to work for two years and then would apply to study abroad. I felt quite glad of his plan as by my knowledge this university is of great fame and I also believe he can further enhance his capabilities of every aspect in this field if educated in a more liberal academic environment.

Therefore, I hereby strongly support Mr. Gregory Tang's application to be enrolled by your program. And his extraordinary performance I have learned through direct or indirect contacts, along with his working experience in R&D of Hutchison Telecommunications have made me convinced that he will be an outstanding candidate deserving your favorable consideration.

**Yours sincerely,**

Professor, Dean of Mechanical and Electronic Engineering Department,  
President of Academic Committee, Beijing University of Posts and Telecommunications

**Letter of Recommendation (2)**

**Dear Sir or Madam:**

I am the general manager of optical system research and development department of the Hutchison Optel Telecom Technology Co., LTD. As his immediate superior, I have known Mr. Gregory Tang for two years since he joined our corporation in July 1999. I am glad to tell you what I felt about him and recommend him to you sincerely and without reservation.

Our corporation is the mainland research and development center of optical telecommunications of Hutchison and HuangPu Company Hong Kong. We have collaborated closely with the Nortel Co. Ltd, the INTEL Co. Ltd and the Lucent Co. Ltd of US in many fields. After graduation from Beijing University of Posts and Telecommunications, Mr. Tang conducted research in telecommunications and transmission field and became the youngest member in the research and development team on IMTP system of our corporation

Mr. Tang has very strong scientific research and product development ability. In the past two years, he has independently completed three difficult projects and achieved success in every project. For example, his design of 40Gbit/s, 80Gbit/s all-timeslot non-blocking cross-connect card and 1008×1008/504×504 VC level all-timeslot non-blocking cross-connect card, the core band controlling system of the whole system of IMTP, met the demands both in long-term stability and in switch time of self-heal ring. I think this should be attributed to his solid theory foundation, strong operation ability and innovation spirit.

For his excellent performance, I selected him as a representative of our corporation to participate in a technology exchange activity with technologist of Nortel Co. Ltd of Canada in Hong Kong. He did a good job and was highly praised by his counterparts for his expertise and proficiency in English. Now, Mr. Tang is the head of the Switch and Cross-connect Group of IMTP Department in our corporation. His team spirit and outstanding leadership impresses all of us.

I have enjoyed a good friendship with him and I appreciate what he has done for our corporation during these years. His going will be a great loss both to me and to my corporation. But I still support his decision. I think it will be beneficial for Mr. Tang's career to study in your university, because XXX University is one of the first-class universities of science and engineering. Furthermore, I believe that he will come back and make greater contribution for the telecommunications industry of China after he finishes his program. So I hope you will give your fullest consideration to his application.

**Yours sincerely,**

**Letter of Recommendation (3)**

**To whom it may concern:**

I am a senior engineer and the head of Transmission Business Department of Great Dragon Telecommunications Group. As the instructor of him in his graduation fieldwork, I am very glad to write this letter in support of Mr. Gregory Tang's application for studying in your university.

I got to know Mr. Tang in 1998 when I was the head of a research and development team on 2.5G SDH optical telecommunications transmitting system, a part of the State 863 Program. He was recommended to me as a top student of Peking Post and Telecommunications University. After strict examinations, I accept him as a member of our team. Although Mr. Tang worked with us for only one year, his research ability, diligence, and team spirit really impressed all of us.

Mr. Tang has strong independent research and exploit ability. When working in our team, he was responsible for the research task of mapping four 34Mb/s signals into a STM-1. He creatively solved the problem of De-mapping and jitter restriction of PDH signals in SDH system. This research raised the transport efficiency of 34Mb/s signals by 33% so as to meet users' higher demand. This technology successfully passed the test of the Information Industry Ministry and was applied to the broadcasting and TV transmission experimental network of HuNan Province later.

Mr. Tang is proficient in English. He can communicate with foreign specialists in English, which is rare among Chinese young people. I think language will not be an obstacle for his study and life abroad.

Telecommunications industry is a rising industry in China. Chinese government is giving full support to its development. I support Mr. Tang's decision, and hope that he will come back to make more contribution to our motherland after he finishes his program abroad. I would be very grateful if you could give his application your fullest consideration.

**Yours sincerely,**