Harbin Institute of Technology SPIE student Chapter

Annual Report December 2018

2018 Chapter Officers

Advisor: Ye Zhang
President: Xinyuan Miao
Vice President: Yidan Teng
Secretary: Qingle Guo
Treasurer: Shu Tian
Co-Advisor: Hao Chen

List of Members in 2018

Pei Cao Chuansijia Tao
Wen Chen Qingwang Wang
Zhenyuan Feng Jinzhe Wang
Guoming Gao Anqi Wei
Tong Gao Longwen Wu
Mengmeng Gao Sifan Wu
Qingle Guo Xiaofang Xu
Youliang Guo Yue Zhang
Qi Li Jing Zhao
Yanling Liu Shengwei Zhong
Xiaochen Lu Chongxiao Zhong
Bing Ma Xinyu Zhou
Xinyuan Miao Kaiqiang Zhu
Qiupeng Sun Lin Zhu
Zhe Sun

Activities outline since foundation of Chapter (2018)

In this year, the chapter organized plentiful activities, which is briefly listed as follows:

1. **Attending Leadership Workshop and Conference of SPIE**
3. **Participated a lecture given by Fellow of SPIE, Chein-I Chang and Professor Yulei Wang**
4. **Organized members’ Skiing on the behalf of SPIE**
Details of Activities

1. Attending Leadership Workshop and Conference of SPIE:

During 17-23 August 2018, our secretary of Harbin institute of technology chapter for SPIE participated the conference of SPIE Optics + Photonics 2018. It held by SPIE, which located on an excellent city, San Diego, CA. SPIE always prepared many informative and interested activities and events to over hundred students from all over the world. As representatives of our chapter, Qingle Guo is entitled to attend the conference and submit four papers to the SPIE library.

Qingle Guo participated the student chapter leadership workshop. Meg All and the other Doctors facilitated a highly interactive session with student chapter from around world on 18 August 2018. First, they introduced the student members where they come from after the opening ceremony, and discussed what being a leader is all about with their group members from different countries. After few minutes, each group had a paper and some pens to draw a picture to illustrate their idea and choose a represent to give a presentation to other groups. In the noon, we have an outdoor lunch with the other student members. In the afternoon, they listened to a lecture about how to communicate with others and played a role-playing game.
In the whole day student member chapter leadership workshop, they experience a great brainstorm and communicated and shared different ideas with the other members, meanwhile, they built relationship with other leaders.

The SPIE Optics + Photonics 2018 began after Student Chapter Leadership Workshop. Every chapter take a poster presentation on 19 August 2018. The poster illustrated their activities among this year for their chapter. Our member had display partial activities for our chapter, such as skating and academic communication.
After that, our member Qingle Guo had the presentation both in poster and oral in the conference. The paper topic was "Change detection ". During the conference, he listened to presentation which they are interested in given by difference professors and communicated with other students. Through this conference, they learned lots of knowledge from each other. After come back, he also gave us a presentation in order to share their experience with other members in our chapter. This is a very meaningful experience and we also appreciate to have this opportunity to the US to attend the SPIE conference.

On 22th to 23th October 2018, we organized the 2018 Seminar on Remote Sensing Image Processing and High Performance Computing Technology. Many organizations participated in the seminar, including Shenyang Normal University, Beijing Aerospace Hongtu Co., Ltd., Dalian Maritime University, Liaoning University of Engineering and Technology, Beijing Institute of Remote Sensing Information Technology, Heilongjiang Data and Application Center of High Resolution Earth Observation System and so on.

Seminar venue of Remote Sensing Image Processing and High Performance Computing Technology. Our co-advisor Hao Chen was giving a welcome speech on behalf of SPIE. The photo also shows the members attending this seminar.

Firstly, our advisor Ye Zhang and co-advisor Hao Chen gave a welcome speech and had an introduction to Harbin Institute of Technology and our SPIE chapter.

At the seminar, many organizations shared their research directions and achievements on processing of remote sensing image. This academic exchange has enhanced the links between institutions and deepened cooperation among them. All of our members have learnt a lot.

Professor Zhao from Changchun Remote Sensing Experimental Station, Chinese Academy of Sciences was introducing his achievements.
Our advisor Ye Zhang was communicating with other participating experts on behalf of SPIE and our members were listening carefully.

In the communication section, the students were all very active. The professors also emphasized the importance of the interest and encouraged the students to do what they’re really interesting. Although the presentations of participating experts were not specific enough, the rigor and professionalism of the professors deeply affected us, expanded our international perspective. I believe the other students also have a lot of harvest.

3. Participated a lecture given by Fellow of SPIE, Chein-I Chang and Professor Yulei Wang

On August 20th, we invited Dr. Chein-I Chang and his team to give us a lecture. Dr. Chang gave us a speech on how to get our paper published. The members learned a lot from the speech. And professor Xulei Wang in Dalian Maritime University shared her research directions and achievements on Multi-band Cooperative Target Detection Technology.

Dr. Chein-I Chang is a professor of Computer Science and Electrical Engineering, University of Maryland, Baltimore County. He is IEEE fellow and SPIE fellow. Dr. Chang’s research areas include data compression, digital signal processing, statistical communication theory, and spectral analysis.

In the lecture, Dr. Chein-I Chang told us many tips on publishing paper, including how to attract readers, how to respond to review opinions, where to see our improvements and so on. Dr. Chein-I Chang also gave us some examples to rebut the
reviews’ comments. The members learned a lot from the speech.

Dr. Chein-I Chang was introducing the review process.

After the lecture of Dr. Chein-I Chang, professor Wang in Dalian Maritime University also shared her research on Multi-band Cooperative Target Detection. Wang stated the difficulties in remote sensing images target detection and explained her idea of solving them detailedly.

The research on Multi-band Cooperative Target Detection represented by professor Wang
4. Organized members’ Skiing on the behalf of SPIE

In addition to academic activity, in this year, our chapter also organized some excursions. On January 19th & 20th 2018, we organized a two-day skiing and tea party at Yuquan, Hei Long Jiang Province. Our members come from across the country, few of them have the opportunity to enjoy the amazing beauty of ice and snow in Harbin. The intention is to promote friendship of chapter members and publicize SPIE. We arrived the ski field in the middle of 19th. After launch, members wear skis and began to skiing. Here are some photos of skiing.

A group photos taken on the gate of ski field. The poster is provided by SPIE.
ShangXue skiing field and its skiing slope. Our hotel is in Manchu style.

During the skiing and climbing on the first day, our members helped and encouraged each other. Whenever there was someone falling down, there was always a hand extended to help them out.

Our advisor and several members who just rush from the slope. Most of them experience
skiing for the first time

Besides skiing, our members can also enjoy the ice slide. We formed a line, holding the other’s legs, and slided down from the hill. We need to trust each other during the glide so that everyone can enjoy the excitement safely.

Our members were prepared for the ice slide and went to the top of hill though conveyor belts.

Our members slided down from the hill arranged in a line.
At evening, we hold a tea part. The topic of the party is to introduce our research interest and advertise SPIE. Although our members are in the same department, our research interests are of great difference. We shared the experiences and personal thoughts gained from research or project. The second day of this activity is free time. This activity is definitely of great success.

The skiing and the tea party had gradually become one of our traditions, for it is a good opportunity for us to know each other better.

**Plan in Future**

Activity Plan 1: Brief academic introduction for lower grade students;
Rent for conference room. 50 USD

Activity Plan 2: Summary report by members who participate in International conference;
Rent of conference room. 50 USD
Food 30 USD

Activity Plan 3: Invite famous professor or scholar in optics to give lectures;
Rent of presentation hall. 50 USD
Food & Drinks. 30 USD
Welcome dinner 100 USD

Activity Plan 4: Tea Party / New Year Party/BBQ
Rent of room of ceremony center or field. 100 USD
Food & Drinks. 30 USD
Welcome dinner 100 USD

Activity Plan 5: Organize a student lecture series for five days.
Each day we choose two members, who share the same research interest but different methods, to introduce their studies from different aspects, so that other members can have an overview of the field even if it is not their expertise. The questions they raise may inspire the speakers. The advisor of our chapter will also be invited.
Rent for the meeting room for five days. 50 USD×3 =150 USD
Printing of the speech related materials. 35 USD
Food & drinks. 45 USD×3 =135 USD
A prize of a book or something related for the best speakers and members who raise valuable questions. 20 USD

Total: 1100 USD

**Financial information**
1. Beginning Balance: 1100 USD.
2. Ending balance last year: 0 USD
3. Spend on the academic activities
   Rent for conference room: 100 USD
   Banner of welcoming: 250 USD
   Rental Charge of classroom, meeting room: 100 USD
   Water and Food for students who attend his lecture: 100 USD
4. Spend on non-academic activities
   Transportation: 150 USD
   Accommodation: 200 USD
   Food and drinks: 200 USD

Ending Balance: 0 USD