Frankly speaking, I was really excited, anxious, and even a little bit scared before I came to China. I heard many stories, read a lot of articles, and watched several documentaries about governmental control and supervision. For Europeans in general, China and its manifold culture may be pictured as a vast question mark in our minds. Furthermore, I realized that I had not known much about Chinese culture and the Asian way of life until then. However, I stayed curious and wanted to know how it feels like to live in one of the economically and industrially fastest growing countries worldwide. Consequently, I decided to take the glorious opportunity that IAESTE and Mettler Toledo offered to be part of a Chinese host family in order to complete an internship abroad for three months in total.
**Chinese Culture**

Firstly, I really have appreciated how kind, helpful, courteous, and respectful in regard to foreign cultures Chinese people are. At times, they simply come up to you and offer their help if you seem to be lost looking for the right way.

Secondly, small conversations at the beginning of the internship got me the impression that some Chinese people are really shy and feel uncomfortable while talking to foreigners. Over time, I have figured out that they are mainly just ashamed of their self-designated insufficient English skills. Most of them lose their timidity quickly and become really curious about foreign culture and lifestyle. However, this is only partially true since most of the people I had to deal with have been open-minded and interested from the beginning. In fact, you may talk to them for hours about any different topic.

Thirdly, despite all the positive experiences and amazing memories I have gained during my stay in China there is also behavior that surprised and even annoyed me at times. First of all, Chinese traffic is literally insane. Cyclists on e-bikes, in particular, apparently do not follow any rule or law. Additionally, all traffic participants love to constantly press the horn as a warning signal. Since we are not allowed to use it at all apart from few exceptions in Germany, I got scared and frightened several times. Furthermore, Chinese people are used to eat and drink quite noisily. Actually, I managed to ignore this behavior as quickly as possible, even though it still bothered me in some instances.

Conclusively, I do not regret my decision at all since I had an amazing time in China full of adventures, experiences, friendships, and joie de vivre!

**Daily Life At MTCZ**

Usually, a working day started with my alarm clock going off at 6:20 AM. Since my host father also works at the Mettler Toledo City II plant (called 'MTCZ'), which is about four to five kilometers away from the main factory Mettler Toledo City I ('MTCT'), we would get to the company by car in the morning. After he had dropped off his son at the primary school, we arrived work always on time at 8:00 AM.
Most of the time, my mentor 'He YongFeng' - his English name is Daniel - was already working as I arrived, and we had a short conversation in order to exchange our weekend plans, tell amusing stories, talk just about the weather, or discuss any different subject. Fortunately, he used to sit right next to me, so I could contact him whenever any problems occurred. During the day, I used to work on different projects, which I am going to describe precisely and in more detail in one of the following chapters.

At midday, the department's lunch break starts from 11:45 AM and lasts until 12:45 PM. The company provides lunch (and dinner), which consists of rice combined with different dishes that vary from day to day, free of charge for all the employees. Actually, I cannot complain at all about the company's meal since I really appreciate Chinese food in general. Especially the fried rice that a colleague prepared at home and took to work for me one day was extraordinarily delicious - xièxiè again! After our return from the canteen, the lights were switched off at the office and all employees took a rest for up to 30 minutes. At the beginning, I was really surprised about this habit. Nevertheless, I do not want to miss the napping time anymore. Eventually, I do not know how I will survive the afternoons without falling asleep once I will have returned back to Germany.

Afterwards, I finished work at 5 pm every day. Since the distance between home and the company is quite long, it took me more than one hour by bus to arrive back at my host family's place. However, most of the time I took the bus to MTCT after work to meet fellow interns for various activities. Alejandra provided us with basic Spanish knowledge during Spanish Corner on Mondays, while Amber, a Chinese HR intern, tried to improve our skills in her native language at Wednesday's Chinese Corner. In addition to that, Gustavo taught us the rhythm and some steps of the famous Brazilian dance Forró on Tuesday.
Moreover, every foreign intern at Mettler Toledo has to prepare a weekly English class, called *English Corner*, for all the employees in their department. At the beginning it was quite a difficult task for most fellow interns and me since we are neither native speakers nor English teachers. Nevertheless, the classes turned out to be great fun while talking, discussing, or playing conversational games with Chinese people. Eventually, most of the students managed to lose their fear talking to foreigners as well as to improve their speaking skills in English.

Due to all these exhausting and time-consuming activities I usually fell asleep dog-tired between 10 to 11 PM in order to be prepared for the following day.

**Living in a Chinese Host Family**

Unlike other IAESTErs in China, interns at Mettler Toledo Changzhou live together with a host family during their whole internship period. In my opinion, this great opportunity offers advantages to both parties in order to improve communication skills and social interaction as well as to simplify ordinary challenges, respectively. Therefore, foreign interns become more familiar with Chinese culture and receive help with regard to common issues like police registration, travelling, bank account, SIM-card, etc. In exchange, they introduce the Western lifestyle to the host family, enhance their spoken English, and support the parents while taking care of their children.
My host family consists of six members in total: my host father Rex (Chinese name 'Xu HanQing'), his wife Laya, her parents, the eight-year-old Seaven as well as the five-year-old Owen. Both of them seem to be full of endless energy, especially in the evening when they are actually supposed to go to sleep 😊. At times, Seaven and I used to exchange our language knowledge in order to improve our English and Chinese skills, respectively. As a result, that benefited both of us.

Obviously, I mainly appreciated the food they offered me every single day. The grandmother usually prepared rice porridge combined with dumplings, pork-filled buns, or fried rice for breakfast. I really could not imagine starting the day in a better way. Unfortunately, I could not enjoy the dinner quite often since many spare time activities like Chinese Corner were scheduled after work. However, a usual dinner at my host family's place consists of a bowl of rice for everyone and several dishes of meat, fish, soup, and vegetables to share. In fact, I gained almost five kilograms of weight during the internship period. Nevertheless, after every meal the grandmother was still worried that I had not eaten enough and was still hungry 😊. Thank you and xièxiè for everything, I really appreciate the time I spent with you.

**MY PROJECTS DURING THE INTERNSHIP PERIOD**

Mettler Toledo is a globally known producer of scales, balances and precision instruments. Within my internship abroad, I was part of the Production of Load Cells (POLC) department. Generally, a Load Cell can be pictured as the 'heart' of a scale and consists of two main parts: the basic steel or aluminum frame, called Counter Force, as well as a small metal plate, called Strain Gage. As the Counter Force converts its given pressure to elastic strain, the Strain Gages transform this elastic strain into an electrical output. However, Daniel provided me with three different main projects, which I will describe in the following.

Firstly, I created a fixture for a calibration test according to the machine's and Load Cell's dimension. Therefore, the clue was to block all possible translation and rotation options as well as to design the fixture in a way that many different types of Load Cells fit onto one fixture.
Secondly, my task was to increase the efficiency of the production line by automatizing the potting cycle. During this process step a special glue is spread on the load cell to protect the strain gages from any environmental impact. Over time, I figured out that the potting robot does not provide a constant glue flow below a certain pressure level, which caused a lot of trouble. Additionally, it was important to control the total glue amount per Load Cell in order to cover the whole surface by liquid glue. Nevertheless, I created a program that was efficient enough to finish the whole process step precisely in reasonable time.

Thirdly, I received the task to support engineer's work in the Research and Development (R&D) department. For this, my project's purpose was to optimize the Strain Gage's location at the Counter Force's frame of a current Load Cell type. Since I have mainly been focusing on the Finite Element Method (FEM) in my master's degree, I really appreciated this opportunity to apply my theoretical expertise on the company's product development. By using ANSYS Workbench, I simulated the effect of small dimensional changes on the strain and stress results of the Load Cell. According to the supplied load of 7.5 or 15 tons, respectively, the normal elastic strain at the desired location of the strain gage is supposed to fulfill the following two conditions.

\[ |\Delta l_x| + |\Delta l_y| \approx 2.4 \frac{mV}{v} \]  \hspace{1cm} (1)

\[ \frac{|\Delta l_x|}{|\Delta l_y|} \approx 0.6 ... 0.7 \]  \hspace{1cm} (2)

At this, \(\Delta l_x\) and \(\Delta l_y\) indicate the normal elastic strain in x- and y- direction, respectively. The designated values of both equations were established by numerous experimental and theoretical investigations.
TRAVELLING ADVENTURES

Besides work related and LePA activities, which I am going to describe in the following chapter, numerous trips to famous and beautiful places in the Eastern part of China occupied almost every weekend. Initially, I have intended to buy a new cell phone here since most technical products are expected to be cheaper than they are in Europe. Nevertheless, I decided soon to invest all of my salary into travelling. Frankly speaking, I could not have made a better decision, especially with regard to the priceless memories I gained.

However, the railway systems in China are simply marvelous. Cities around Changzhou can be reached conveniently by high-speed ('G') or slower trains ('D', 'T', 'K'). Since it takes less than two hours to get there, we visited Suzhou which is known as the Chinese Venice, the capital of Jiangsu province Nanjing, and Wuxi as a day trip from Changzhou. Additionally, the 24.2 million metropolis Shanghai, a very commercial and industrial city, impresses with its stunning skyline, especially at nightly twilight.

Moreover, overnight trains or even planes took us to famous places such as Beijing, the Yellow Mountain in Huangshan, Xi'an, and Zhangjiajie. We visited the 'Great Wall' and the 'Forbidden City' in Beijing's snowy look as well as the globally known eighth world wonder 'Terra-cotta Army' in Xi'an. Frankly speaking, I mainly enjoyed the trips to the mountains. Therefore, I simply admire the impressive shape of the quartz-sandstone pillars in Zhangjiajie. Since the floating mountains of Pandora's landscape in the movie 'Avatar' were modeled after the scenery in Zhangjiajie, this place is currently also well known as 'Avatar Mountains'.

Figure 7: The 'Bund' in Shanghai

Figure 8: Great Wall in Beijing

Figure 9: Zhangjiajie National Forest
The LePA (Learning through Participation and Achievement) program was created in cooperation of the company's Human Resources (HR) department with IAESTE China Mainland to enhance communication and collaboration between Chinese mentors and overseas interns. Therefore, various activities were offered especially at the beginning of the internship period: a welcome night and a cultural workshop, where everybody introduced their country; trips to the Nanshan Bamboo Sea as well as to the outdoor activity center Xilewan Ecological Park. Additionally, all current Chinese and foreign interns at MT spent an afternoon together for the city rush, as we were divided into three groups. The purpose of this event was to visit several designated spots in Changzhou while spending as little time and money as possible. In fact, it was a great opportunity to make new international friends for both Chinese and overseas interns. Furthermore, HR suggested and supported the Christmas evening at the company that I organized together with fellow interns on December 24th. Luckily, this event made us feel at least a bit home. In addition to that, it was really amusing and joyful to share our personal Christmas traditions with host families, mentors and colleagues.

Unfortunately, most of the time mentors and hosts were either busy taking care of their kids or joined the same activity already in the preceding internship period. Creating a yearly diversified LePA program might be a solution for this problem although it takes a lot of time to realize that suggestion.
USEFUL THINGS THAT SIMPLIFY YOUR STAY IN CHINA

**WeChat Pay/Alipay:** Since everything related to *google* is blocked, Chinese people use *WeChat* to communicate with each other. Compared to the Western counterpart *WhatsApp*, *WeChat* is a more multifunctional tool that you do not want to miss in China. Besides texting and calling, I used the app to book plane or train tickets, to pay at the bus, as well as to top up my mobile prepaid SIM-card. Furthermore, even though it is very inconvenient in Europe to buy stuff with your cell phone, Chinese people literally pay anywhere using *WeChat* or *Alipay*. Since we used it almost every day, I highly recommend to install the apps. Even street musicians in shopping malls prepared a QR code in their guitar cases instead of asking for coins 😊. Unfortunately, you need a Chinese bank account to get the payment function working.

**Amap:** *Amap* works as the Chinese equivalent of *google maps*. With help from my colleagues, I managed to get used to this app quickly even if there is no English version available. Therefore, I just remembered the buttons I had to press to get somewhere. Furthermore, it is a useful tool, especially if you are dependent on the city's bus or metro systems.

**DiDi:** Since public transportation is really cheap in China, taxis and express (the Chinese *uber*) constitute a very convenient way to move from one place to another. Additionally, the use of this app is simple: enter your desired destination and the *DiDi* driver will pick you up in a few minutes at your current location.

**Power Bank:** Due to the frequent use of my quite exerted cellphone, its battery capacity got worse from day to day. At the end of the internship, I had to charge my phone at least twice a day. As a matter of fact, the use of a power bank was essential as you seem to be lost without your phone in China.

**Translation/Dictionary:** Ahead of your departure to China, I recommend downloading a translation app that includes the function to translate Chinese
from the camera. At work, I had to get familiar with a programming manual which was authored fully in Chinese. In consideration of this issue, it would not have been possible without that special function. During my stay, I mainly used the google translator where you can download specific languages in order to use it offline as well.

**Coffee:** Be aware that Chinese people do not drink coffee as they mostly prefer different types of tea. So if you will really miss coffee in the morning or the afternoon, I suggest bringing it from home since it is really rare and expensive even in large Chinese supermarkets.

*Wǒ bù huì shuō zhōngwén.*: Meaning something like 'I don't know how to speak Chinese.'; it was the most common phrase in my poor Chinese vocabulary. At times, people try to talk to you, which is actually really joyful (taxi drivers, vendors, random people on the street, etc. - just to name few of them). Unfortunately, most of the time the only language they know is Chinese. Even if I repeated that phrase several times, some just kept on talking. Apparently, I still have to work on my pronunciation skills…

**VPN connection:** Eventually, life here without VPN connection is quite difficult - especially for foreigners. You have to be aware that common apps and web pages, which we use almost every day without even thinking about it, are blocked in China. For the Chinese counterpart to google maps, called Amap or baidu maps, exists no English version, which makes the orientation in unknown cities a thrilling challenge. In addition to that, my parents did not get their WeChat working as they got blocked immediately after installation for no reason. However, I suggest downloading as many VPN's as possible. So if one stops working, you might just switch to another one. I mainly used ExpressVPN, despite the fact that you have to pay for it. Additionally, there are some VPN services free of charge as well, whose connection speed is usually worse and slower and might not be enough for WhatsApp calls (WangVPN, betternet, SecureVPN, …). As a result, I suggest using VPN applications to communicate and stay in contact with your friends and family at home.
**Warm clothing:** Since Chinese apartments located south of the *River Yangtze* are not provided with a central heating system, the average temperature inside reaches a maximum value of 5 degrees Celsius in December. With the high humidity, it feels even colder. Therefore, Chinese people are used to wear their jackets at home as well.

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First of all, I want to honor my mentor's effort providing me with the challenging projects and giving me the opportunity to grow professionally and personally. During the internship period Daniel turned out to be more of a friend of mine than a mentor, since we worked together and talked to each other almost every day. Additionally, he supported me while I was facing any tasks regarding the projects as well as my whole stay in China, even if it was just about purchasing train tickets for the weekend trips. I really appreciate that he put a lot of effort to simplify my adventure in China every single day. Thank you very much!

Furthermore, I want to thank Rex and his family for facing the challenge to host me during the whole period. They made me feel home in this vast and foreign country, even if it was just by hearing the noise of being surrounded by people. Additionally, I loved the food they provided every single day - it was literally outstanding. Thank you, Seaven, for enhancing my poor Chinese vocabulary and improving my pronunciation skills.

In addition to that, I am really grateful for the numerous activities and the whole organization of the internship planned by HR. Due to Leyna's effort we managed to integrate into the company's policies and environment quickly and without any complications. Furthermore, I want to thank you, Amber, for your patience teaching us Chinese and apologize for all the confusion we caused, while we bothered you with all our problems.
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It was simply marvelous to travel and spend as much time as possible together with fellow interns as well as other IAESTERs in China. Thank you for making this such an amazing and remarkable time of my life.

Lastly, I would like to thank all of my colleagues working in the POLC department. Everybody was really helpful and kind as they made me feel being a part of the whole team. Finally, I am really going to miss the interesting and joyful conversations.

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