

Internship Report Cover Sheet



Last name, first name: Ahmed, Haseeb

Class: 2022

Major: Electrical and Computer Engineering

Internship Institution: Mubarak Vision

Internship Position: IT service intern

Internship Duration: From: 30/06/2021 (DD/MM/YYYY) To: 30/08/2021 (DD/MM/YYYY)

Type of Internship: (selectable) Company

('Research Institute,' 'Company,' 'Governmental Organization,' 'Non-Profit Organization,' 'Other')

Brief Description of Hosting Institution/Company:

Mubarak Vision company deals in ophthalmic tech instruments across Pakistan. The company has a size of 50 employees in three offices across Pakistan.

Brief Description of Department at Hosting Institution/Company:

It Department deals with diagnose and repair all designated products, preventative maintenance, installations and upgrades per specific training, manuals. These products require Hands-on experience with lasers, linear sensors, cameras (CCD/CMOS), LED lighting, optics, optomechanical and electro-mechanical systems by designing functional models

Sector: (selectable) Health

(Advertising / Aerospace/ Associations/ Automotive/Banking, Insurance, Finance, Law/Chemical Industry/ Consulting/ Consumer Goods/ Culture, Arts, Sports/ Electronic Industry/ Energy, Utility/ Engineering and Construction/ Environment/ Foundations/ Government, Politics/ Health/ IT, Telecommunication/ Logistics/ Media/ Medicine/ Nutrition, Food Industry/ Real Estate/ Textile Industry/ Tourism/ Trade)

City: Lahore

Country: Pakistan

Supervisor's name: Nazir Ahmad

Supervisor's position: Lead for IT department

Final Evaluation:

In this section, please evaluate the following aspects of your internship (make a cross in the relevant box):

(1 = not important / not good at all / not relevant at all, ..., 5 = very important / very good / very relevant)

	1	2	3	4	5✓
The relevance of this internship to your major					✓
The relevance of this internship to your personal career goals					✓
The quality of supervision at your internship					✓
The quality of the work environment at your internship					☆
Your overall satisfaction with your internship experience					☆

We would like to make this Internship Report available to your peers (accessible only by

Jacobs University account holders) to support their internship and job search. Please indicate if you agree to this or not:

☒ **Yes**

☐ **No, because:** _____

Internship Report Form

INTERNSHIP REPORT

Haseeb Ahmed

Electrical and Computer Engineering 2022

INTERNSHIP COMPANY: Mubarak Vision

Briefly describe the approach you took in finding this internship - why did you decide to go for such an internship, how much of an influence did your courses play in your choice, how did you go about applying, did you use networking, etc.? What was your application tactic?

At first, I collected all documents from the university. These documents included the Enrolment Certificate, Academic Transcript, and Mandatory Internship Confirmation. Updating my resume was a hassle, but thanks to a number of seniors and batch mates who helped me with the application process, I was able to create a professional resume. I used a referral to apply for this position.

Mubarak Vision has a headquarters in my home country Pakistan. It's a renowned company in ophthalmic instrument provider industry in Pakistan with a structured corporate system. The magnitude of its influence in the industry can be judged by the fact that many big hospitals and clinics in Lahore and Karachi (Two largest cities in Pakistan) are their clients.

Why did you choose this type of an organization? What is the organization's mission? What do they offer and who are their customers? What is the organizational structure? What is the competitive environment of the company in the industry in which it operates?

Mubarak Vision is a family owned Company based at Lahore, Pakistan. Mubarak Vision established on 19th Sept. 2005 just after the liquidation of Mubarak Sons.

Mubarak Vision is dedicating its efforts to market State-Of-The-Art Ophthalmic Surgical Products for both Anterior & Posterior Segment Surgeries. Mubarak Vision Carry Contact Lenses, Contact Lens Care Products, Rigid IOL'S, Foldable IOL'S, Ophthalmic Surgical Products for Anterior & Posterior Surgeries and Sutures.

Mubarak Vision constantly up-grade and expand its existing Product Lines and are keen to provide High Quality Services to our Customers all over Pakistan.

The reason I choose this company was I really like using the actual electronics rather than doing mathematical coding stuff. Secondly, it was in my home country so it gave me chance to go back home after 2 years.

The Internship Position: Describe the internship position within the company. How does your internship experience relate to your major? To what extent was the knowledge from your studies in your major beneficial for you during your internship? Did you concentrate on one department or did you also work for others? What were your daily, weekly, monthly tasks? What were your goals? Did you constantly receive feedback and if so, how useful was the feedback? What projects were you involved in?

I worked as a IT service intern at Mubarak Vision from June to August. My responsibilities included mainly the calibrating and repair of designated products within an assigned service territory, including preventative maintenance, installations and upgrades per specific training and manuals.

I spent first few days familiarizing with the industry, then I start learning to use and calibrate the instruments. I caught up with the manuals and instrument very quickly due to my knowledge of Signals and Systems and DSP classes and Labs. The manuals provided to me were very similar to the instrument manual in our labs.

During my internship my only focus was in IT department.

In the beginning I was working in the headquarters where I was working under a technician mentored me and my colleagues and gave us the training for using an ophthalmology machine. Our task was to perform different scans using the machine, calibrate it and get familiar with different settings and write a technical report on it. We were given 2 weeks for it. In the third and fourth week I had to assist a technician, who went hospitals and clinics and help in setting up, repairing and maintain the machines.

My second month was more exciting because my task was calibrating lasers. It looked simple in the beginning, but I had to revise many of my physics concepts for this task. As this task required both methamatical and theoretical knowledge of lasers.

For this task, many precautions were taken firstly most of the work was happened in operation theater so I had prepare like doctors. Which include washing hands with iodine soap, getting into OT dress, wearing gloves mask and goggles. I was constantly monitored and wasn't supposed to turn on the laser(except when we had to check the energy level) because its invisible. We use the pointer for calibration. At the end of the month I had submit a report of my tasks which I submitted after coming back to Jacobs.

For both months I was supervised and received constant feedback from the technicians. They allowed me to make mistakes and helped me understand what I was doing wrong.

What were some of the difficulties you encountered? How did you deal with them? Who did you seek advice from? How did the people react when you told them about your feelings? Did language create problems? Did intercultural misunderstanding occur?

Basically, there wasn't any difficulty during my internship. There were some small issues like sometimes the machine wasn't working or instead of aligning the laser I unaligned it or taking the wrong readings or using the wrong scan. But I always try to first consult the manual and then ask the technician. But I won't call these difficulties I think they were part of the job.

I didn't face any problem due to language because everyone in the company speaks and understood my mother language so there wasn't any issue of that. As I was doing my internship in my home country so there wasn't any issue of intercultural misunderstanding.

A very essential part of the internship is the work environment. How did you like the atmosphere at the institution? What was it like to work for the company? Did you feel the strong special culture? What was this culture like? What were your colleagues' visions and goals? Did you feel being taken care of? How did the relationships with your colleagues and your supervisor develop?

The company was pretty organized. But I can't say about the culture because as my most work was in the field not in the headquarters. Most of colleagues were very senior from me. There were 2 more interns but we only worked together for first 2 weeks. I interacted with them, and they were interesting people one of them was in his final year of engineering and was applying for master/PHD in United States. The other one was a dropout of UC Berkley and was planning to work on his own project.

I felt I have been taken care of well. My relationship with my colleagues and supervisor were pretty good.

What did you learn during the internship?

During the internship I learned about the practical implantation of the theoretical concepts. Although the implementation was not same as the way it is taught in class. This taught me that one mathematical concept can be use in various circumstances. As in class the concepts are usually inclined towards wireless communication. This gave me chance to learn to familiarize myself with new things building upon previous knowledge.

How did it help develop your academic/technical knowledge and/or your personality?

This helped me in learning better way of documenting my practices which will help me in future research project and my theses.

What were some positive and negative aspects about your particular internship experience?

The positive aspects were that I learned to apply my knowledge in the practical world, which led me to be confident about my skillset. The only negative aspect was that sometimes the help of our supervisor was not enough, and which led us to be unproductive sometimes.

How prepared do you feel for the future?

With an exposure to the work environment, I feel I have up to some extent made myself prepared for future industry/research field. I have learned to adjust myself into work environment and also learned to work in a group.

What does the future look like?

With only one internship in electrical field. I still think I cant really comment on the future.

Would you recommend this internship to your peers?

Yes, I would recommend this internship to my peers as it was a great experience for me. It gave me chance to interact with many people out of my field. I usually interacted with doctors and nurses which gave me chance to understand how the technology is helping people and how important is our job as an Electrical Engineer.