

CERN Openlab : An exhilarating experience ft. Preveessin site



hackertron

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This summer i was selected for CERN (*Central Euorpean Organization for Nuclear Research*) openlab students program. By far this is one of my best working experience and also my first non-remote internship.

There were 1660 applicants for CERN openlab program , 40 students were selected this year. The student group was quite diverse (*probably 14+ nationalities*). We all shared apartments in group of 4 for 9 weeks living together and having fun. One thing is for sure you will have lots of events organized by CERN (*educational visit to ETH Zurich, OpenSystems , IBM and of course CERN Experiments*) and lot lot more un-official ones organized by students. It is a challenge to maintain balance

between work, events and other daily tasks(my fellow openlab students and summer students knows best 😊)

Initialization



View from my apartment

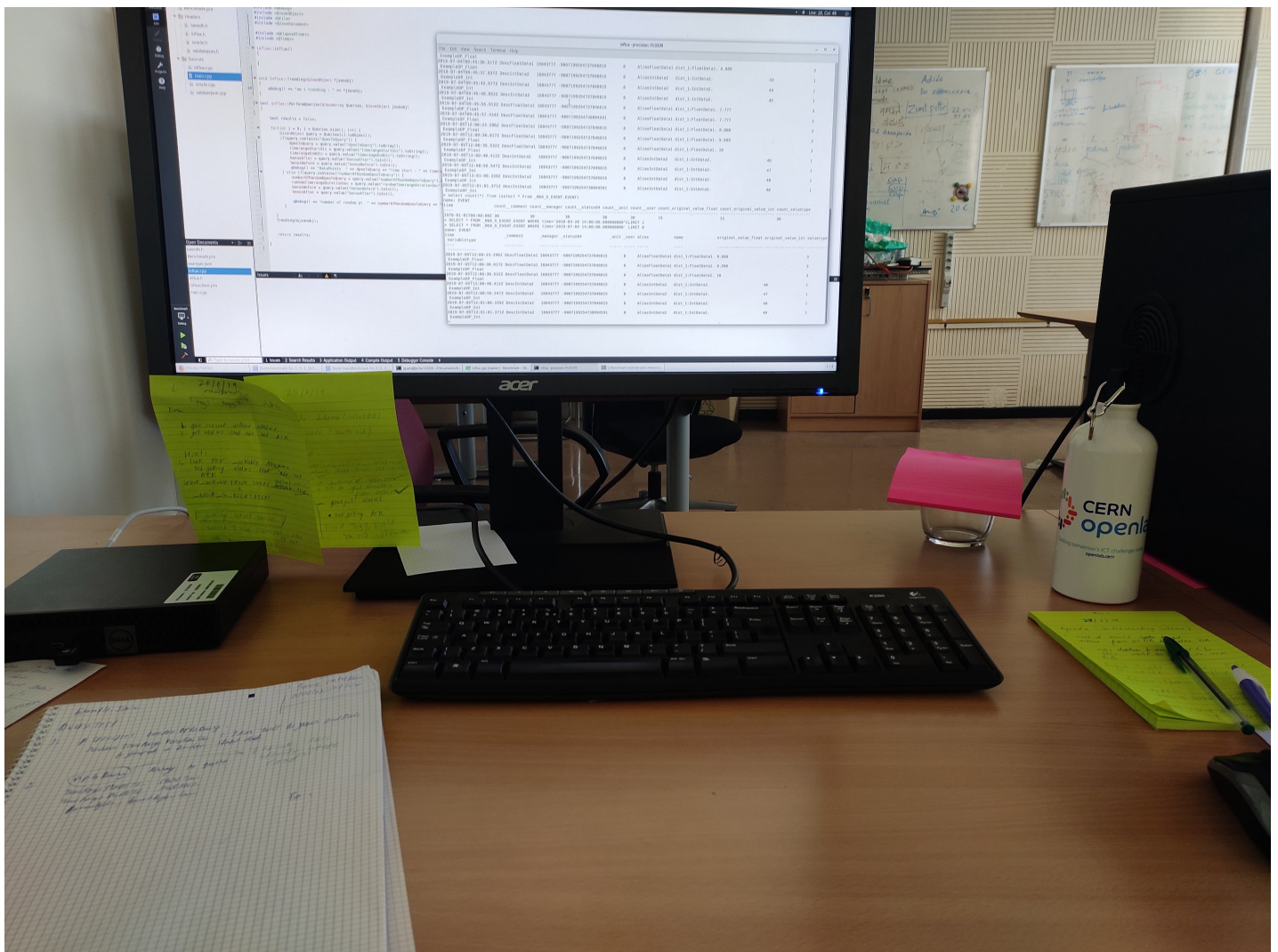
My joining was from 24th June but i moved in 4 days before to setup everything for myself and also to explore Geneva 😊. All openlab students were hosted at Sejours and Affairs aparthotel in St.Genius Pouilly, France.

We all had instructions for first day like getting our badges, some paper work etc and after all this we met our supervisors. Now here things take different turn for me. Out of all 40 students i was the only one whose workplace was at CERN Prévessin site. My supervisor arrived and told me you will need bike (i was like what .. we are already at CERN). I was assigned to CERN Beam department (BE-ICS-FD). CERN Prévessin site manages the CERN control system and industrial control system and lot more. At first I was bit 🤔 like why i am the only student

working there, it was a mixed feeling at that time. But later i found out it was the best thing to happen to me, working away from everyone gave me quite a unique experience(*more on this later in article*). Surely there were some downsides like : to attend the lectures i had to bike a lot (*roughly 4.6 km one side*), i was not able to join others for lunch (i also had only 1 choice for restaurant R3), my workplace was also far from from our hotel. But on the bright side I was the only one who got Aircon in his office 😊(*Yes Switzerland is quite hot in summers and no fans :p*)

My project was to create benchmarking tools for CERN Next Generation Archiver. The idea was to decide upon the database technology which will be best suited for CERN specific use case. The tools were written in combination of C++ and Qt framework. My work will directly impact CERN's archive system. My project was collaboration between ETM/Siemens and CERN. CERN openlab program is bit different from other programs, it's more geared towards new technologies that can enhance CERN further.

A day in life of CERN openlab student



My workplace with my scattered notes and ideas.

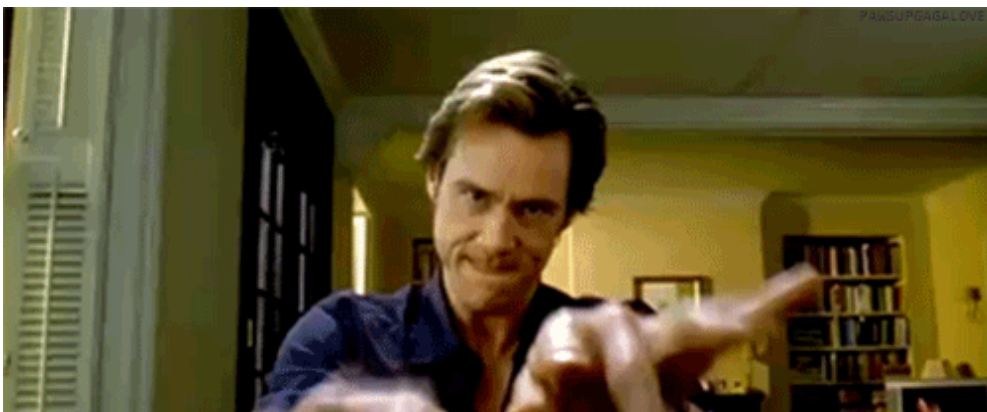
A typical day for me was something like this. I used to wake up at 06:00 AM so that i can reach office by 08:30 AM (*timings were 08:30 AM to 05:30 PM but it was not strict, you were free to come any time*). I used to bike to my workplace (*there was no direct shuttle for my workplace, i had to change shuttles which was annoying*) which was a nice small workout in morning.

After taking a quick overview over my mails and notes and discussing with my mentor i used to set tasks/goals for day or week. We used to have a coffee break at 10:00 AM at common area where we used to discuss some very important stuff like how will you differentiate between a cup and a mug and all sorts of cultural topics like why in the world Nai (which sounds and reads as NO) is YES in Greek.

After a nice 15 min of coffee break we used to hustle hard till 12:00 and then we get our lunch break. Both of my supervisors used to bring their own lunch (some others too). Me and Miltiadis (my colleague/friend) used to gather everyone from other departments and then head to Restaurant R3 for lunch.

I usually used to get free by 5:30–06:00 PM and then head for carrefour market for grocery shopping where i find my fellow openlab students. I used to workout at roughly 07:00–07:30 PM. After a nice workout i used to cook my dinner (*i almost cooked everyday mainly because of my health and dietary needs and i like my food way better*). After all the chores i was free by 09:30–10:00 PM. Now i can do anything meet with everyone else and do something , do nothing and scroll social media while cursing how boring is St.Genis (St. Genis is nice and quiet place), head to Geneva or just sleep. On weekend it was common for all of us to travel to somewhere and explore Switzerland or neighbouring countries.

Crunch Time



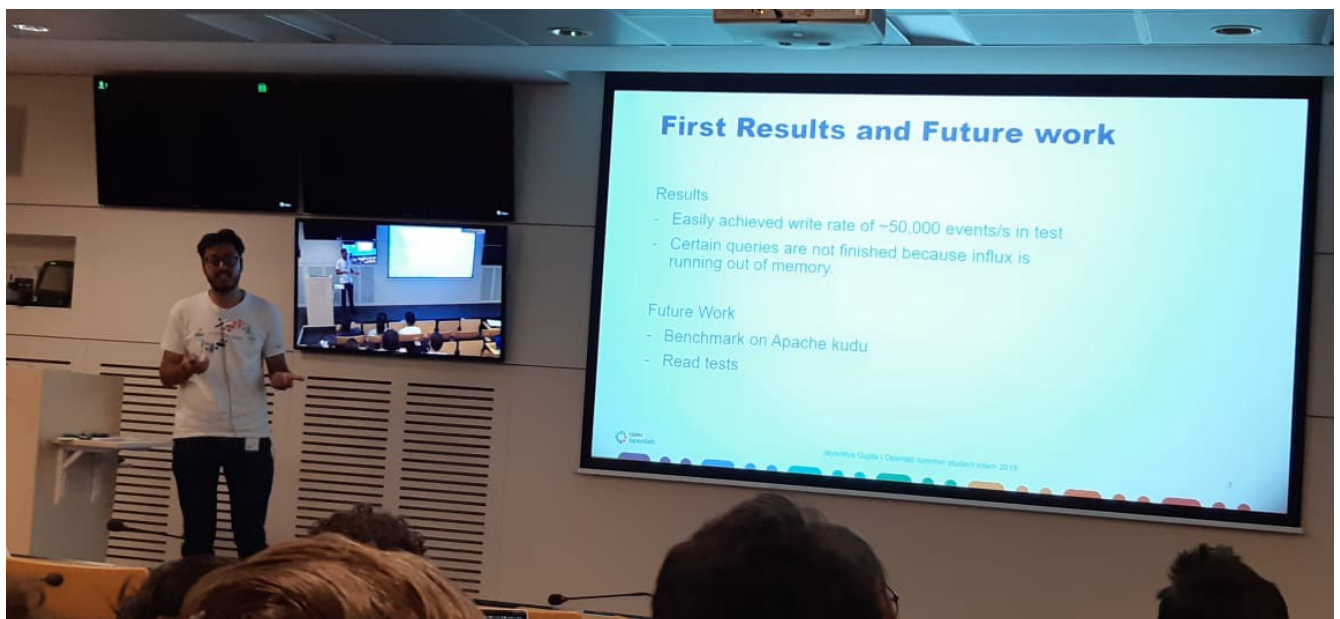


August was here and all openlab students had to prepare a report, a lightning talk for their projects. Now to make things more interesting i was also selected for OSIG (*Open Source in Gaming*). A conference organized by The Linux Foundation in collaboration with Google at San Diego, California.

So my schedule was as follows: prepare for lightning talk on 13th august, prepare for my session at OSIG on 20th august, prepare the project and final report by the end of 23rd august. Also i had no US visa.

Now this is where i got relentless support from my supervisors and everyone from my department. I almost gave up on going to US and was ready to cancel my session but my supervisors encouraged me a lot and guided me during whole ordeal. From how to present myself to helping with my work and visa i got all support. CERN also helped me in getting VISA in just 5 days (I got early appointment because of CERN and got the visa delivered in just 3 days).

In the meantime i was working on my lightning talk too. We did some practice session too and delivered it on 13th august. It went well 😊. You can see it **here**



CERN openlab lightning talk day 1 (13th august)

Now it was time for OSIG. My session and my demo game was ready too. It was time to travel to California and deliver it. The session was successful, audience loved it and I also got covered by a tech journalist 😊.



My session at OSIG, San Diego

Now time for the most important thing. The project and my final report. I left San Diego on 21st August. After taking a flight of roughly 18hrs I reached Geneva on 22nd August at 10:40 AM (*the time zone difference was of 9 hrs*). After landing I straight away headed to the office and reached at roughly 12:00. At this point I was too tired and jet-lagged but my report was still not ready and I had only 1.5 days to complete it.

Luckily I was documenting my whole project during this whole internship (*best advice from my supervisors : document early, document often*) also my supervisor prepared some high-level points/guidelines for my report. The first draft of my report was ready by 03:30 PM. My supervisors reviewed it and suggest some changes. After reaching home I was still working on my report and finally on 23rd August I finalized it 😊.

The Endgame



23rd august was my last day at CERN. I was happy that i completed my internship and was sad at same time. These 2 months went so fast , i learnt so much from everyone and also got discipline in my life. I got a proper farewell from my department and also got souvenirs from my supervisors 🙏.





CERN goodie bag + CERN Mug + CERN power bank and lot more

It was time to say goodbye to everyone. Before going back to India i had planned a Europe trip where i went to some new places and met some old friends 😊.

The End





Jet d'Eau

I didn't cover everything in this article. There is so much to write about like CERN trip to Zurich , our visit to CERN experiments and of course summer students unofficial events and lot more. I might write a part-II .

If you are still reading this then you deserve this ☺

1. CERN openlab Summer Student programme 2019 lectures
2. Summer Student Lecture Programme Course lectures
3. Application process for CERN openlab : CERN openlab usually announce their opening by end of November or early december. You will need a good CV , at least 2 recommendation letter and a motivation letter. You must have completed at least 4 semesters of your degree. There is no one-to-one interview for openlab program so everything depends upon the documents that you have submitted and your previous experience.
4. Application process for CERN summer student : CERN summer student is different from openlab program. It's not specifically geared towards CS, it's a mix of CS , physics and mathematics . It's quite Cross-disciplinary. Application process is quite similar to openlab program itself , you can read more about it here : <https://home.cern/summer-student-programme>
5. First CERN openlab summer student lightning talk session
6. Second CERN openlab summer student lightning talk session