## A Reflection Report for Attendance at 2018 IEEE ComSoc Summer School and Hackathon on Fog Computing, Shanghai, China

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## 2018 IEEE Summer School and Hackathon on Fog Computing

2018 IEEE ComSoc Summer School and Hackathon on "Fog Computing" was held in Shanghai, at ShanghaiTech University campus, from June 26 to 29, 2018. The goal of this summer school and hackathon was to bring together the world-class researchers in Fog Computing with undergraduate, graduate students and interested researchers from academia and engineers from industry, to educate the audience on both basics and recent advancements in Fog Computing overview, IoT, Optimization, Big Data, and Deep Learning, and to encourage collaborations on related topics.

Out of all applications for the 2018 IEEE ComSoc Summer School and Hackathon on "Fog Computing", Our team **Illuminox** was selected as a top 11 team and invited to attend the summer school and hackathon. Our team members for the summer school and hackathon were Ashish Rauniyar (PhD Student, University of Oslo, Norway), Desta Haileselassie Hogos (PhD Student, University of Oslo, Norway), Siva Leela Krishna Gudi Chand (PhD Student, University of Technology Sydney, Australia).

We (Me and Desta) boarded the Lufthansa flight from Oslo to Shanghai on 24th June 2018. It was a 19 hous long flight with a transit in Frankfurt (Germany) and Chengdu (China). We landed at Shanghai Pudong Airport on the next day i.e., on 25th June. We took a taxi and went directly to our hotel-Jinjiang Inn Select Shanghai Zhangjiang which was located at Hi-tech park in Pudong district of Shanghai. We put our luggage in our room and directly went to Shanghai-Tech University for the registration. In the hotel, we met other summer school and hackathon participants and had a small chit-chat.

On June 26, the Fog computing summer school officially started with a keynote from T. Russell Hsing who is one of the founders of Open Fog Consortium. The keynote title was 'Fog Computing and Networking: A Key Pillar for Current 5G Engineering to future 6G Research'. And there were several

interesting talks on Fog Computing, Machine learning, Deep learning from the well-renowned speaker from Jun Liu (CISCO), Prof. Yang Yang (Shanghai-Tech University), Qing Ling (Sun Yat-sen University) followed by coffee breaks, lunch break. In the evening, we had a Banquet dinner where we enjoyed lots of delicious Chinese dishes.

On June 27, the summer school started with a keynote talk from Makoto Yasuda (Hitachi & Open Fog Consortium). The keynote title was 'Fog Computing for IT OT Convergence'. There were also some interesting keynote talk from Frank Zhao (National Instruments) and Jiayou Zong (Xilinx Corporation). The summer school ended at 5 pm and we had some time to roam around Shanghai. We all had fun visiting the Bund area of Shanghai.

On June 28, the Hackathon officially started for 24 hour. There were 11 teams for the hackathon and hackathon participants were not allowed to leave the campus premises. All the coding need to be done on the site. Our team Illuminox, we (Me, Desta and Chand) discussed to implement Blockchain on Fog Computing for secure transcations of data for mobile robots. We did coding in Python and successfully implemented Blockchain on Fog Node (which was given by the summer school). We really had a great time coding together and fun while implenting our solution. Next morning, i.e., on June 29, our friend Chand presented our idea. Although, we did not win the first prize(USD 5000), the judges were quite impressed by our idea and gave a honorable mention for our idea at the summer school. We all had a great learning experiences.



Figure 1: Me(Ashish), Desta Hagos and Chand (in center) Along with Other IEEE 2018 Summer School and Hackathon Participants, Speakers and Organizers

For detailed information about the Summer school and Hackathon events, please visit this link: http://shift.shanghaitech.edu.cn/summerschool2018/program.html



Figure 2: Our Hackathon Competetion Banner

We travelled back to Oslo from Shanghai on 29th June 2018 through Lufthansa Air.

## **Concluding Remarks**

Attending IEEE COMSOC Summer School and Hackathon will definitely offer you a strong cognitive about thinking and coding experiences with lots of fun, having new friends and great networking at the same time. So, I give my strongest recommendation to attend this summer school and hackathon. I personally thank COINS for sponsoring me to attend this event.



Figure 3: Me(Ashish) and Desta representing COINS at the IEEE 2018 Summer School and Hackathon on Fog Computing



Figure 4: Me(Ashish), Desta and Chand Discussing and Implementing Ideas



Figure 5: Me(Ashish), Desta and Chand Discussing our Idea at the Hackathon

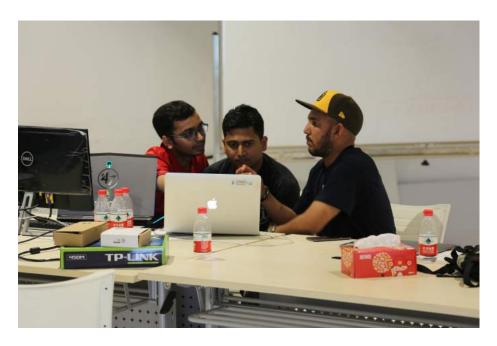


Figure 6: Me(Ashish), Desta and Chand Implementing our Idea at the Hackathon