

Interim Reference Letter

Mr. Yuan Xun Gu, born on 27.10.1983, in Shanghai, China, has been working at our company since 01.09.2011 as Researcher. This interim reference letter covers the period from July 2013 and has been issued on request of Mr. Gu who is still employed with our company.

DOCOMO Communications Laboratories Europe GmbH (DOCOMO Euro-Labs), a subsidiary of the leading Japanese mobile communications company, NTT DOCOMO, was established in November 2000 in Munich, Germany, in order to conduct research on mobile communications technologies. DOCOMO Euro-Labs is committed to collaborating with operators, vendors, universities and research institutes in Europe.

In particular, Mr. Gu is responsible for the following tasks:

1. Evaluating the quality of experience (QoE) for streaming services and setting up a corresponding measurement environment [e.g. to measure the Video Quality Metric (VQM) of compressed streaming services].
2. Investigating different possible methods on capturing videos on mobile devices running on Android.
3. Automating the video evaluation process and writing corresponding software and scripts.
4. Conducting product evaluation of transcoding products for streaming services to prepare purchase decisions of the headquarters.
5. Analysing trends of mobile network operators in video compression for common streaming services (e.g. YouTube, CNN, Dailymotion) and developing corresponding applications to perform measurements in Germany and Europe.
6. Setting-up and performing measurements for different DASH clients and servers running in the cloud to monitor, understand and optimize the parameter settings
7. Investigate on future traffic challenges with focus on augmented reality.
8. Writing software and scripts for analysis and measurements and reporting results to the management

Mr. Gu has always used his expertise in programming (e.g. Java, Python, Matlab, XML, etc.) and operating systems (e.g. Android), which is of extraordinary depth and breadth, confidently and very efficiently in his daily tasks. Additionally, during his work he has acquired good knowledge in video streaming services (in particular YouTube, DASH) and implementations on client and server side as well as QoE evaluation (e.g. by means of standardized VQM scheme). Due to his exact analytical abilities and his quick comprehension, he has found good solutions, which he consistently and successfully puts into practice. As a result, Mr. Gu contributed considerably to a product evaluation report that was highly acknowledged by headquarters.

Mr. Gu has accomplished his assignments with high dedication and great personal commitment during his entire employment with our company. He has always completed tasks assigned to him to our complete satisfaction. He is always exceptionally open and cooperative towards his colleagues and gets on well with all associates and always meets them in his friendly, open and accommodating way, making him a good team player. His behaviour towards superiors, colleagues and business partners is always flawless.

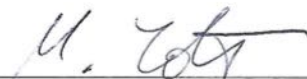
We thank Mr. Gu for his valuable contributions to our company and look forward to our future cooperation with him.

Munich, Oct. 06, 2014

DOCOMO Communications Laboratories Europe GmbH



CSO & Director of Standardization,
Management and Support Group
Dr. Thomas Walter



Director of Network Research Group
Dr. Matthias Lott