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APEC2015 Trip Report  
Charlotte, NC, USA  
March 15-19, 2015

From Mar 15<sup>th</sup> to 19<sup>th</sup>, I went to Charlotte in the USA to attend APEC2015 (Applied Power Electronics Conference and Exposition). As the premier event in applied power electronics, APEC focuses on the practical and applied aspects of the power electronics. This time is the 30<sup>th</sup> anniversary of APEC (since 1985).

APEC is not just a designer's conference. Manufacturers and suppliers of components, quality and test engineers, marketing, sales and anyone involved in the business of power electronic will come to here from around the world.

There are a lot of sessions:

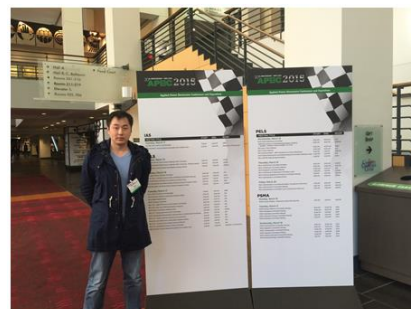
In Professional Education Seminars, a number of designer, manufactures and marketing experts are invited. High quality seminars provide an invaluable education.

Carefully picked more than 500 papers making up the Technical Sessions. These innovative technical solutions are introduced and discussed by oral presentations and posters.

Nearly 300 leading and competitive companies exhibit their products or services in Exhibitor Seminars & Exposition.



APEC2015 was held at the Charlotte Convention Center



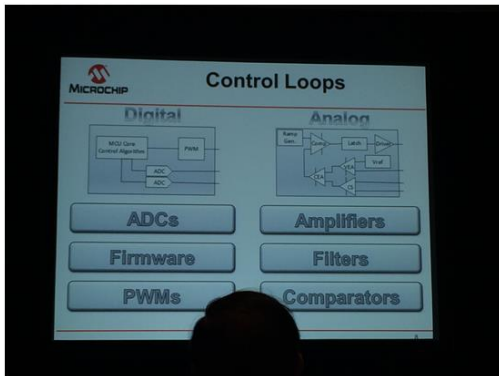
I am at APEC2015.



Plenary session



Social event at NASCAR Hall of Fame



Digital control versus analog control

Additionally, a lot of information about the newest development trends and advanced techniques are discussed in Plenary Session and Rap Sessions. Wireless power transform, wide bandgap semiconductor, and so on, these hot topics are concerned.

The Conference Social Event is held at the NASCAR Hall of Fame. It is very *interesting, too*.

Because of that my research is focused on stability analysis and control system design of power supplies, I am more concerned about the research related to control systems. For example, the tradeoff between digital control and analog control systems, the geometric-based control, and so on. They are all interesting and very useful for my future research.

I would like to thank Professor Haruo Kobayashi and Mr. Nobuyoshi Ishikawa for their support in this visit. This is an invaluable experience in my research and life.

## Charlotte, North Carolina

Charlotte is the largest city in the U.S. State of North Carolina. There are 13 hours' time lags with Japan. It is named in honor of Charlotte of Mecklenburg-Strelitz, who had become queen consort of Great Britain the

year before the city's founding. Therefore, Charlotte is also nicknamed as the Queen City. A second nickname, Hornet's Nest, derives from the American Revolutionary War. The professional basketball team based in Charlotte is named as Charlotte Hornets. The city is a major U.S. financial center, with both Bank of America and Wells Fargo's East Coast operations headquartered in the city.

Charlotte has a humid subtropical climate with four distinct seasons. While the sunrise and sunset of this city both are later than Japan, and the temperature difference in one day is large when I was there, the maximum difference is about 20°C. As a whole, Charlotte is a beautiful and modern city.



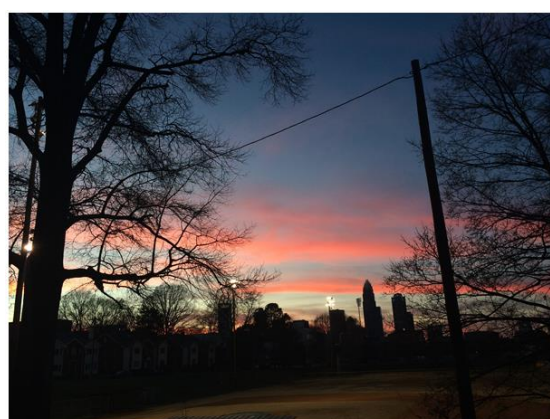
Time Warner Cable Arena, Charlotte  
Hornets' home court



City scenery 1



City scenery 2  
(Bank of America)



Charlotte Sunset, at 19:40