

# Travel Report from DSN'02

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## Introduction

The DSN'02 conference was held in Washington DC June 23-26 at the Hyatt Regency Hotel in Bethesda, which is a suburb to Washington DC. I went with a fellow PhD, Ola Larses, who is an industrial PhD at Scania. This was my first major conference and the purpose with the trip was to present a "fast abstract" and to get inspiration from interesting presentations.

## Washington

Washington in June is very hot. The temperature during daytime is between 35 to 40 centigrade. The conference was held in Bethesda, which is located a little bit outside of central Washington. It was hard to figure out what kind of area it was, was it a suburb, an industrial area or both? The scenery in the central parts of Bethesda was dominated by the big Chevy Chase Bank, the Hyatt Regency Hotel surrounded by some old small houses rented by lawyers, and a big high school, the Chevy Chase High. No doubt Chevy Chase was (or is) an important man in Bethesda. In the outskirts there were medium sized houses, which were in a good condition but no one seemed to live there. Bethesda is a strange place.

## The Conference

The DSN conference is the most important dependability conference. It is attended by many of the famous persons within the field such as: Jean-Claude Laprie and Herman Kopetz. It is also a very big conference with three parallel sessions and two workshops per day. This makes it a little bit hard to follow and some times interesting sessions collide. The variety of the subjects is also quite large but the IT and e-Commerce sessions dominate. My feeling is that they want to be more attractive to the industry where the money is, which might be good though.

## Presentations

The first day of the conference was on the Sunday before the actual conference started. It was filled with workshops.

On the second day (or the first day depending on how you see it) João Cunha held his presentation: On the use of disaster prediction for failure tolerance in feedback control systems. Attendance for the presentation was low and I think that this community isn't that interested in control systems. The idea described in the paper is that by using a fail bounded approach instead of a fail silent, the demands on redundancy can be lowered. By using a model of the system it is possible to predict whether the control system can tolerate a disturbance or not and therefore transient errors can be filtered out. Another interesting presentation was: Model checking safety properties of servo-loop control systems, held by M. Edwin Johnson from ITT. He

looked at hazards in tracking antenna systems and used control theory and a symbolic model checker to cope with the hazards.

There was a very interesting panel discussion on the subject dependability benchmarking. This discussion revealed the big gaps within the dependability community. Generally it can be said that it is hard to find what to measure. Reliability and availability might be too abstract and even impossible to measure. Maybe more concrete and implementation specific properties to measure have to be found. It was also debated whether fault-injection is a good benchmarking method or not. It was pointed out that in order to get relevant measures from fault injection a relevant fault model has to be used.

## **Conclusions**

The conference was a good experience for me. I got new ideas and saw that there are gaps to fill in.