Travel Report from the 5th International Conference on Principles and Practice of Constraint Programming (CP'99) and the International Workshop on Real-Time Constraints (RTC'99)

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About the trip

The purpose of the trip was to attend the 5th International Conference on Principles and Practice of Constraint Programming (CP'99) and the International Workshop on Real-Time Constraints (RTC'99) which was a post-conference workshop. The events took place in Alexandria, Virginia, USA on Oct. 12-15 and Oct. 16 respectively. The major interest was the workshop where I was to present the work-in-progress paper "Real-Time System Constraints Where do They Come From and Where do They Go?". It might seem odd for a real-time student to visit a constraint programming conference but since I intend to use constraint programming as a modeling tool for real-time scheduling, it could be a valuable experience. This was also the first time I participated in an international conference.

CP'99

About the conference

CP is the only conference dedicated to constraint programming, even though the area also appears in conferences on Artificial Intelligence and Logic Programming. Most CP research is conducted in Europe which was reflected in the submissions as well as in the participants list. There were 97 submissions (30 accepted) of which about 70 were from Europe. The number of participants was around 100 which was about 50 persons less than last year when the conference was held in Europe.

About the papers

The topics of the papers could be divided into two areas which are *Constraint Satisfaction Problems* (CSP) and *Constraint Programming.* Papers on Constraint Satisfaction Problems addressed the theoretical aspects of the studied problems, e.g., complexity theory, consistency techniques and search algorithms. The Constraint Programming papers discussed how specific problems are modeled and solved using tools that implement CSP techniques. There were some papers that later might be interesting for my research, e.g., "Excluding Symmetries in Constraint-Based Search" by Backofen and Will.

About the organization/arrangements

The conference was hosted at the same hotel where most of the participants were staying which was pretty convenient. Without having much to compare with, the conference felt well organized and was performed smoothly without any mishaps. The conference included a social event which was a visit to the Smithsonian Museums in Washington D.C. I visited the National Air and Space Museum which is the most visited museum in the world. There was also a conference banquet which was held on a replica of a 19-century riverboat on the Potomac river.

RTC'99

About the workshop

This was the first time the workshop was held and due to a very tight submission schedule not that many papers were received (about 10). This was one of four parallel workshops and the attendance was fairly low (about 7 people). This could be due to the short notice but also that the workshop was not organized by someone known within the constraint programming community. This made it was difficult to know what the workshop actually would be about.

About the papers

There were one work-in-progress paper (mine) and four regular papers presented. There was also an invited talk. All the regular papers and the invited talk discussed formal specification and verification of real-time systems and were not particularly interesting for my work. I had hoped that the workshop would be more about how to identify constraints on real-time systems and how to ensure that they are satisfied. Furthermore, I had expected the papers to somehow relate to the topics covered by the main conference. My paper was the only one that mentioned constraint programming.

About Alexandria

Alexandria can be considered as a suburb to Washington D.C. even though it actually is a town of its own. It is an old town that has quite a number of 18-century buildings. Among the attractions are the homes of Robert E. Lee and George Washington. Despite the feeling of a small town, downtown Washington D.C. is only fifteen minutes away.