

Transforming programs with Alberto in the Rome of the last century (Invited Talk)

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When I heard that Alberto was retiring this year, I realized that I had never thought that such a thing would ever happen. Because to me, Alberto has never shown any signs of having made his time or getting tired of his teaching and researching. On the contrary, Alberto has always been looking forward to new challenges, and always with a big smile on his face. And also because Alberto is just not changing over the years. It does not matter how long you haven't seen him, when you meet him again, he will be the same, kind, friendly, smart and alert person who remembers the things you have shared together, in fact remembering everything. Alberto's memory is just impressive.

In 1996-1998, I had the chance to do a post-doctorate program with Università di Roma Tor Vergata and the IASI-CNR with Alberto and Maurizio. Before that, I had met them in a couple of workshops in relation to the LOPSTR network while I was doing my PhD with Pierre Deransart at INRIA on verification of logic programs.

In Roma, Alberto and Maurizio introduced me to their work on unfolding/folding. They had been exploring that field of research for several years already. Together we have been working on partial deduction in particular via unfold/fold rules [1] and had a nice result on the KMP string matching example [2]. Our work was presented by Maurizio in the POPL'97 symposium [3] which was held in Paris La Sorbonne that year.

Apart from the scientific work in Roma with Alberto and Maurizio, I have great memories of my daily life at the IASI during my stay there. First of all going to work every day passing by the Colosseo on my "motorino" to arrive at Viale Manzoni, where the IASI was located at that time, was a great start to the day. Arriving there at the entrance of the building, there was Mauro, a charismatic guy in his uniform of carabinieri who would check on everyone entering the building. Very friendly guy, but initially quite intimidating as you are not usually used to seeing a man in uniform with a gun checking on you when you arrive at work in a research centre!

Lunch time with Alberto and Maurizio at the IASI was a special moment of the day. We normally had a sandwich in Maurizio's room, the three of us, or the four of us sometimes when Laurent Fribourg was visiting the IASI during his sabbatical year in 1997. During lunch time, Alberto was very talkative and always had something interesting to tell. Most of the time about work, but not only. It could have been about anything in fact. Every aspect of science was a source of interest to him and he would love to share his knowledge. He would use the white board and make drawings to explain things about physics for example. He was talented at explaining difficult things and I could easily tell how great a teacher he was at university. A colleague of mine nowadays, at the European Patent Office, Elisa Cilia, was one of Alberto's student at University di Roma Tor Vergata, and confirmed to me how good Alberto was for teaching and sharing his passion for computer science. Both Alberto and Maurizio are also very knowledgeable in history of art. I have learnt a lot from them. Last time I saw them in Roma, we went to visit the Basilica San Clemente which is not far from the IASI. San Clemente is of special importance among churches in Rome, for it is a unique example of a building that illustrates a sequence of epochs. One can see example of Roman architecture on three levels, from classical antiquity through the early Christian Era, to the late Middle Ages. One can also see spectacular frescoes by the Florentine artists Masolino and Masaccio in the upper church. During the

visit with Alberto and Maurizio, I have been astonished by the amount of knowledge they both had on the subject-matter.

During lunch time also, Alberto liked to tell anecdotes about people he had met during his stay in Edinburgh at the beginning of his career, more generally about people he had met throughout his years as a researcher. He inevitably had something nice to say about all those people and always showed great respect towards their work. In telling stories, Alberto could be carried away and be so funny at times. We laughed a lot. His enthusiasm, optimism, and willingness to make you feel good in what you are doing is what I remember most about Alberto during my stay in Roma. I have learnt from him that if you contemplate doing something, whatever it is, then you need to put your best into it, otherwise the whole thing is pointless. And indeed, Alberto has always been committed in everything he is doing.

Beyond work, I have been very lucky to share private moments with Alberto in Italy. He would share about his family, especially about his old mum who was living in Loreto (province of Ancona, Marche) at the time. Alberto would visit her almost at every weekend. He always had nice stories to share about Loreto, about his relatives, his mum, nephews and nieces... The family was important. And Alberto had been very supportive when my Mum became ill and when she eventually passed away. He told me she would be in his prayers. He also gave me something for her, so that she could pray Virgin Mary of Loreto. He would write to her (in a very good French by the way). Although my Mum never met him in person, she always asked about Alberto and asked me to send her love. As we all know, Alberto is a sporty man, very keen on climbing, and very fit. A couple of times he took me with him and his group of friends from the church for a walk in the slopes of the Abbruzzi. Nice memories.

What I also very much appreciate in Alberto is his love for children and the way he interacts with them. I have seen him many times with Marco and Massimiliano, Maurizio and Vincenza's boys, in Roma, when they were small but also more recently. Alberto is for them "lo zio", and indeed, he was behaving as a loving uncle to them. My children also had the chance to meet Alberto in Roma a couple of years ago, and have a good memory of him. During a meal at Maurizio's, Alberto was telling them stories and playing tricks they still remember.

Now that Alberto is officially retiring, nothing much will change in my view. Alberto will probably carry on keeping an eye on what is happening in the scientific world, and of course especially in the field of computer science. No doubt that he will be remembered for a long time for his great contribution to the field. I am just curious to see where he will decide to live as a pensioner. Roma? Loreto?

Well, Alberto, I would like to say how much inspiring you have been to me. And I am very happy to meet you here in Dublin. I wish you all the best for the future and I hope to see you again. Happy retirement!

Un abbraccio forte !

References

- [1] Alberto Pettorossi, Maurizio Proietti & Sophie Renault (1996): *Enhancing Partial Deduction via Unfold/Fold Rules*. In: *LOPSTR'96*, Stockholm, Sweden, pp. 146–168, doi:10.1007/3-540-62718-9_9.
- [2] Alberto Pettorossi, Maurizio Proietti & Sophie Renault (1996): *How to Extend Partial Deduction to Derive the KMP String-Matching Algorithm from a Naive Specification (Poster Abstract)*. In: *JICSLP 96*, Bonn, Germany, p. 539.
- [3] Alberto Pettorossi, Maurizio Proietti & Sophie Renault (1997): *Reducing Nondeterminism while Specializing Logic Programs*. In: *POPL'97*, Paris, France, pp. 414–427, doi:10.1145/263699.263759.