Constraint programming (CP) is a framework for modeling and solving combinatorial problems originating from Artificial Intelligence. CP has made significant progress over the last decades, and is now considered as one of the foremost paradigms for solving combinatorial problems. The basic assumption in CP is that the user models the problem and a solver is then used to solve it. Despite the many successful applications of CP on combinatorial problems from various domains, there are still challenges to be faced in order to make CP technology even more widely used. A major bottleneck in the use of CP is modeling. Expressing a combinatorial problem as a constraint network requires considerable expertise in the field. To overcome this obstacle, several techniques have been proposed for modeling a constraint problem automatically. Along these lines, an area of research that has started to attract a lot of attention is that of constraint acquisition where the model of a constraint problem is acquired (i.e. learned) using a set of examples that are posted to a human user or to a software system. This talk will cover the basics of constraint acquisition, review recent developments, and point to the many problems that remain open.

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