My (Un)Favourite Things

Paweł Urzyczyn

Warsaw University

Abstract. The talk will be devoted to four open problems I was unsuccessfully trying to solve in the past. These problems concern:

- Regular and Context-Free Dynamic Logic;
- The question of polymorphic collapse;
- Higher-order push-down stores and procedures;
- Polymorphic definability of recursive data types.

Each of these problems addresses a basic issue in the logical foundations of computer science, and each has been open for a long time. This talk aims at bringing back the challenge, and sorting out the related confusions.