

Preface

This volume contains the papers presented at FLinAI15: Fuzzy Logic in AI workshop - held in conjunction with IJCAI-2015, July 25-31, 2015 in Buenos Aires.

Fifty years ago, almost to the day, a paper, titled Fuzzy Sets, by Lotfi A. Zadeh, was published in *Information and Control* (8.3, 1965: 338:353). An apparently simple extension of the notion of set membership led to a revolution in computer science, mathematics, engineering, philosophy, biology, to name a few.

At the time of writing these lines, a simple online search shows the number of citations of that first paper on fuzzy sets to be 57,473, that is, well in excess of 1000 citations per year in each of the intervening 50 years. At the same time, searching with keywords "fuzzy", "fuzzy logic", "fuzzy sets" returns in excess of 700,000 results for the same fifty year period. Although to some extent fuzzy set based research remains controversial in some quarters, these numbers of citations and papers published show that fuzzy logic is "here to stay".

The first Fuzzy Logic in AI workshop organized in conjunction with an IJCAI conference was in 1991 (in Sydney, Australia). It was followed by workshops at IJCAI-93 (Chamberry, France), IJCAI-95 (Montreal, Canada), and IJCAI-97 (Nagoya, Japan). As many conferences on fuzzy sets and logic became well established, fuzzy sets and logic based research has found other outlets for presentation. However, we believe that a workshop on fuzzy logic in AI should be part of every IJCAI conference, as fuzzy based methods continue to have a significant impact in AI.

When we announced this workshop, many researchers expressed an interest in participating. Then as time went by, fewer followed through, submitting an abstract, fewer submitting a paper, and so on. Thus the workshop consists of seven presentations, and we can say that it is indeed a workshop as opposed to a conference, where presentation time is not issue, allowing for presentations of 30 minutes per presentation and extensive discussions.

A few words about the review process: we, the co-chairs of the workshop read every paper submitted and occasionally asked for help with the reviewing process from some of our colleagues. EasyChair proved to be a wonderful platform for managing this workshop and they deserve thanks for providing this product to the scientific community.

The workshop is meant as a salute to Professor Lotfi A. Zadeh, who, in the last 50 years since the publication of his first paper on fuzzy sets, produced an outstanding body of work, inspired and mentored many researchers across the world, and continues to do so.

July 21, 2015
Cincinnati

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