

Message from the General Chair

Welcome to the third IEEE International Conference on Formal Engineering Methods (ICFEM 2000) and to the historic city of York. ICFEM has been organised in conjunction with ZB2000 which runs from 29th August to 2nd September. I hope you will be able to benefit from attending both conferences, and use the intervening weekend to see some of York's many attractions.

Formal methods have been in existence for over 30 years. There have been many successful applications of the methods, but they have not been widely adopted in industry. There are various reasons for this – some genuine technical problems, and some due to poor communication between academic researchers and industry. The aim of the conference is to address these issues, and to provide a forum for practitioners and researchers to meet and exchange ideas.

Our three distinguished invited speakers will give us some unique insights into these issues. Professor David Parnas is well known for his pioneering work in software engineering. Of particular relevance to this conference is his work on developing practical formal methods which fit into the broader engineering process, thus addressing some of the problems of communication with other engineers. These techniques have been applied in a number of sectors including aerospace and civil nuclear power. Professor Sir Tony Hoare of Microsoft is a pioneer in the field of formal methods and the innovator or developer of many of the techniques and principles now fundamental to the field. Professor Werner Damm from the University of Oldenburg has made significant inroads into the technical problems, through extending and harnessing the power of model checkers so they can be linked to industrial strength notations such as Statecharts. This work has enabled the practical applications of formal methods in a number of industries, including automotive and aerospace.

The conference program includes a further 19 papers, representing research work from around the world, and a closing panel session. Contributions are drawn from a wide range of subjects including algebraic approaches, Z, verification, retrenchment and animation.

I wish to express my thanks to the conference organising committee and especially to Mike Hinchey and Shaoying Liu who have co-ordinated the technical programme. Thanks are also due to Ginny Wilson, Andy Galloway and the local organizing team, and the IEEE Computer Society, in particular Anne Rawlinson, for sponsoring the conference and arranging the publication of the proceedings.

I hope you will find ICFEM 2000 to be stimulating and valuable.

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