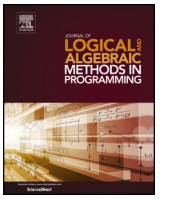
Journal of Logical and Algebraic Methods in Programming 85 (2016) 805

Contents lists available at ScienceDirect

Journal of Logical and Algebraic Methods in Programming

www.elsevier.com/locate/jlamp



Quien sabe por Algebra, sabe scientificamente
A tribute to José Nuno Oliveira

A position statement opens José's web page:

Software technology is pre-scientific in its lack of an effective basis for predicting computers' behaviour. My research aims at improving scientific standards in software design through formal methods and calculational techniques. These include the application of mathematical transforms in refactoring and improving existing software theories. I do this with passion and firmly believe this will make computing better in the future.

Since his return from Manchester to Minho, in 1984, José Nuno Oliveira has devoted all his academic life to this programme. In other words, to the development of software modelling frameworks, as well as the associated calculi, the two pillars of any true Engineering discipline. Along the road, he made remarkable contributions to a broad range of topics — from data refinement to systems prototyping, from relational calculi to typed linear algebra, from functional dependence theory to reverse specification. But what may be even more, he was able to foster synergies, both in academia and in industry, gathering students and collaborators, to promote a scientific view of Software Engineering, in the triple dimension of research, teaching and big-scale industrial applications.

It is indisputable José's decisive role in promoting Formal Methods in Portugal. His efforts brought the University of Minho to a leading position in this area, and contributed to build a solid, internationally recognised research group. Even more decisive, however, for successive generations of students and colleagues, has been his rigorous, Socratic teaching style, his enthusiasm and endurance, his generosity and creative power. To discuss a weird intuition or the proof of a theorem, to wander through literature, music or history, to share a personal problem or make himself present in a difficult situation, José is always there, as an enthusiastic scientist, an attentive listener and a genuine friend.

This special issue, and the Festschrift Symposium held in Guimarães on 26th September, 2015, was planned as a tribute to his achievements and an expression of gratitude.

On the occasion of his 60th birthday, it collects a number of scientific contributions by Bernhard Aichernig, Roland Backhouse, Gilles Barthe, Eerke Boiten, Raymond Boute, Yu-Hsi Chiang, Juan M. Crespo, João Ferreira, John Fitzgerald, Jeremy Gibbons, Cesar Kunz, Peter Gorm Larsen, Elisabeth Jobstl, Cliff Jones, Ralf Hinze, Ian Hayes, Peter Hoefner, Dirk Hofmann, Hugo Macedo, Alexandre Madeira, Dan Marsden, Manuel Martins, Alexandra Mendes, Bernhard Moller, Shin-Cheng Mu, David Naumann, Renato Neves, Luis Soares Barbosa, Martin Tappler, Tarmo Uustalu and Michael Winter. The editors wish to thank all the authors and reviewers, as well as all participants in the Festschrift Symposium. Their presence and enthusiasm, from the very outset, was decisive to this celebration.

In July, 2nd, 1830, in a letter to Legendre, Carl Gustave Jacobi wrote: *M. Fourier avait l'opinion que le but principal des mathématiques était l'utilité publique et l'explication des phénomènes naturels; mais un philosophe comme lui aurait dû savoir que le but unique de la science, c'est l'honneur de l'esprit humain, et que sous ce titre, une question de nombres vaut autant qu'une question du système du monde.* We are grateful to José for educating our regard in similar way.

Universidade do Minho, 26th September, 2015

Luis Barbosa
Alcino Cunha
Alexandra Silva

http://dx.doi.org/10.1016/j.jlamp.2016.07.002
2352-2208/© 2016 Published by Elsevier Inc.