

Foreword

Education is changing. It has become a global activity; it is enjoyed and pursued by millions of people around the world, and it is widely recognised as vital for our future well-being and prosperity. University level education is, in particular, promoted by governments across the globe as the means by which we can move our societies forward. Coupled with this, there is increasing recognition that universities need to work closely with industry and business partners to ensure that the education we offer meets the current and future skill needs of our people. These concepts are relevant to all industries, but are particularly important to the software industry.

This book draws on the experience of international experts who are working at the interface between universities and the software industry. The authors have a wealth of real practical experience of working in this important area, and this is very evident within this text. The book proposes a series of strong and important arguments for the development of a new form of industry-oriented software education, which produces curricula that go beyond the theoretical and develop within our future graduates the practical software skills needed to develop and drive the tools of our future economies. A number of different models of curricula are proposed and discussed by the authors: each of these has been implemented with different degrees of industry interaction. The models draw from projects which straddle eight countries across Europe and China, and present the reader with practical examples of advanced university curriculum development and novel teaching and learning practices. Throughout the book, there is an emphasis on the highest quality educational programmes, based upon world-class quality assurance models.

The authors have worked together on a significant Europe-China programme which enabled university staff from the two continents to work together on novel models of university-industry collaboration, and through this, to develop new state of the art software curricula. The book is the culmination of the project, and draws together the unique experiences of the authors in a text which is a very significant piece of work in the field of global university-industry collaboration.

This work will be of interest to academics, students, and practitioners, not only from computer science and software, but also from any discipline developing vocational skills within their graduates. The chapters are thought-provoking and helpful for designers and developers of software educational programmes, including taught undergraduate, postgraduate, and research programmes. It will also be of interest and use to technical managers, human resource specialists, and trainers who work within the software industry and those industries heavily reliant on software for their operation. The book offers significant insights for strategic planners in government higher education policy, and for those who work at the strategic level in our universities across the world.

This book is timely, and its lessons are vitally important if we are to enable our software and other industries to move forward and provide the competitive future of our global economy. I personally greatly enjoyed reading the work of my colleagues and look forward to seeing the lessons within put into practice by others.

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