ECE PROFESSOR PUBLISHES FIRST COMPREHENSIVE BOOK ON USING SIGNAL PROCESSING FOR BIG DATA APPLICATIONS

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Zhu Han, professor of electrical and computer engineering at the UH Cullen College of Engineering, along with colleagues Mingyi Hong of Iowa State University and Dan Wang of Hong Kong Polytechnic University, have published the first comprehensive book on the use of signal processing for big data applications.

The book titled Signal Processing and Networking for Big Data Applications, was published by the Cambridge University Press and will be available in April 2017.

This unique text helps make sense of big data in engineering applications using tools and techniques from signal processing. It presents fundamental signal processing theories and software implementations, reviews current research trends and challenges and describes the techniques used for analysis, design and optimization.

When asked why a comprehensive book on signal processing for big data is so important, Han explained, "Different researchers have different perspectives for big data analysis. This book is the first one to give a comprehensive view for the story, so that the researchers can select the appropriate signal processing tools for specific problems."
The book is ideal for researchers and practicing engineers looking to solve practical problems involving large amounts of data, and for students looking to grasp the fundamentals of big data analytics.

“We hope that this book is a great resource for graduate students who want to pursue big data analysis, as well as engineers and data scientists who want to know the current state of art data applications,” said Han.

Just as with any unprecedented venture, the authors experienced a few bumps in the road along the way. “It was quite a learning curve for such a dynamic and diverse field. I was lucky to have two active, young researchers involved with whom I have collaborated and studied on many occasions.”

Han has published an impressive eight books by prestigious publisher Cambridge University Press and plans to release another soon.

“I hope to continue to create books that not only serve as valuable resources to students and professionals, but also contributes to the field,” he said.

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