

## Preface

The Computational Visual Media (CVM) conference series is intended to provide a major international forum for exchanging novel research ideas and significant computational methods that either underpin or apply visual media. The primary goal is to promote cross-disciplinary research to amalgamate aspects of computer graphics, computer vision, machine learning, image and video processing, visualization and geometric computing. The main topics of interest to CVM include classification, composition, retrieval, synthesis, cognition and understanding of visual media (e.g., images, videos, 3D geometry).

The Computational Visual Media Conference 2020 (CVM 2020), the 8th international conference in the series, will be held during September 3–5, 2020, at Macau University of Science and Technology. Following the success of previous CVM conferences, CVM 2020 attracted broad attention from researchers worldwide. A total of 118 technical papers were submitted and reviewed by an international program committee comprising 86 selected experts. A total of 30 papers were accepted for oral presentation.

Among the 30 accepted papers, six outstanding papers have been selected for inclusion in this special section, and two papers will be published in regular issue of JCST after revision. These papers cover a wide spectrum of topics including image synthesis, image super-resolution, deep learning for denoising, video segmentation, visual analysis of video content, action recognition and facade analysis. In addition, we have also included an invited survey paper on lane detection for autonomous driving.

We hope that readers will enjoy this special section. We are grateful to all the paper authors and reviewers for their valuable contributions.

### Leading Editor

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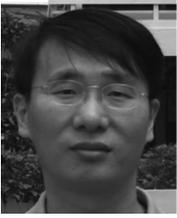
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**Shi-Min Hu** received his Ph.D. degree from Zhejiang University, Hangzhou, in 1996. He is currently a professor in the Department of Computer Science and Technology, Tsinghua University, Beijing. His research interests include digital geometry processing, video processing, rendering, computer animation, and computer-aided geometric design. He is the Editor-in-Chief of Computational Visual Media, and on the editorial boards of several journals, including Computer Aided Design, Computer & Graphics, and Journal of Computer Science and Technology.



**Ying He** received his B.S. and M.S. degrees in electrical engineering from Tsinghua University, Beijing, and his Ph.D. degree in computer science from Stony Brook University, New York. He is currently an associate professor with School of Computer Science and Engineering, Nanyang Technological University, Singapore. His research interests fall into the general areas of visual computing and he is particularly interested in the problems which require geometric analysis and computation. He is an associate editor of Computational Visual Media and Computer Graphics Forum.



**Belen Masia** is an assistant professor in the Department of Computer Science at Universidad de Zaragoza (University of Zaragoza), Zaragoza, Spain, and a member of the Graphics & Imaging Laboratory of the I3A Institute. Before, she was a postdoctoral researcher at the Max Planck Institute for Informatics in Saarbruecken, Germany. Her research interests span computational imaging and displays, virtual reality and applied perception. She is a Eurographics Junior Fellow, and the recipient of a Eurographics Young Researcher Award. She is also an associate editor of ACM Transactions on Graphics.