

Preface

The Pacific-Rim Symposium on Image and Video Technology (PSIVT) 2015 took place in beautiful Auckland, New Zealand. Nicknamed the “City of Sails,” Auckland welcomed us with warm spring weather and lots of boats sailing across the bay.

Previous PSIVT symposiums were held in Taiwan, Chile, Japan, Singapore, South Korea, and Mexico; all host countries sharing a coastline with the Pacific Ocean.

PSIVT 2015 attracted 133 submissions to the main conference of which 61 were accepted (overall acceptance rate of 46 %). Of these, 26 papers were delivered as oral presentations and 35 papers as posters.

Submissions came from all over the world, with major contributing countries Japan (19 papers) and Germany (seven papers). Each paper was reviewed in full by at least two (and up to four) reviewers, followed by a brief rebuttal, before the area chairs made their recommendations. None of the four program co-chairs was allowed to be a co-author on any paper submission for PSIVT 2015.

For the 2015 issue of PSIVT, we invited three keynote speakers:

- Victor Erukhimov from Itseez3D, Moscow, presented a talk on “Embedded Real-Time Computer Vision.” Victor is CEO of Itseez3D, the company behind the open source library OpenCV and a driving force of the new OpenVX working group. The talk highlighted image processing standards and hardware acceleration for embedded vision systems.
- Joe Wünsche from UBM München talked about “Perception for Off-Road Driving.” Joe presented UBM’s history of vision-based autonomous driving and demonstrated his group’s latest ELROB-winning driverless vehicles for off-road terrain.
- Richard Green from the University of Canterbury, New Zealand, gave an overview on “Computer Vision for Precision Agriculture.” In his talk, Richard highlighted projects such as robotic vine pruning and potential agricultural applications for intelligent drones.

As program co-chairs, we selected three outstanding papers this year for awards:

- The IAPR Best Paper at PSIVT 2015 was awarded to Zexuan Ji, Jinyao Liu, Hengdong Yuan, Yubo Huang, and Quansen Sun for their paper “A Spatially Constrained Asymmetric Gaussian Mixture Model for Image Segmentation.”
- The IAPR Best Application Paper at PSIVT 2015 was awarded to Vijay John, Zheng Liu, Chunzhao Guo, Seiichi Mita, and Kiyosumi Kidono for their article “Real-Time Lane Estimation Using Convolutional Neural Networks and Extra Trees Regression.”
- The IAPR Best Paper Presentation at PSIVT 2015 was awarded to Domingo Mery, Erick Svec, and Marco Arias for their contribution “Object Recognition in Baggage Inspection Using Adaptive Sparse Representations of X-ray Images.”

The social program of PSIVT 2015 included a welcome reception, a bus excursion to Muriwai, a banquet at a fantastic countryside restaurant, and a “survivors’ party.” These social events certainly also contributed to the success of the conference.

We thank our PSIVT 2015 sponsors Auckland University of Technology (AUT), IMIT Chiba University, Nagoya Institute of Technology, KAIST Korea, and IEEE New Zealand North Section, all reviewers and area chairs, the local Organizing Committee (especially Amy Claughton and Tessa Lloyd-Hagemann of UoA), the University of Auckland (UoA) for providing the venue, Linda Barbour (UWA) for remote conference–office support, and of course, last but not least, our general co-chairs, Reinhard Klette (AUT) and In So Kweon (KAIST).

We also thank IAPR, the International Association for Pattern Recognition, for endorsing PSIVT 2015, and Springer’s *Lecture Notes in Computer Science* team, especially Alfred Hofmann and Anna Kramer, for the efficient communication when submitting and finalizing this volume.

We look forward to seeing you all again at PSIVT 2017 in Wuhan, China, nicknamed the “Chicago of Asia.”

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Image and Video Technology

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