

State of the Journal

David A. Forsyth

At time of writing (October 2016), I have been editor in chief for nearly 46 months and *TPAMI* is in strong shape. My term is ending, and in two months time, I will be replaced by Sven Dickinson. Our community is now so large that each time I attend a conference I find I do not know most of the people I encounter; what is worse, many of them do not know me. So it's not unkind of me to introduce Sven, because there will be people who don't know him. Sven is Professor of Computer Science at the University of Toronto. He's written well known papers on many computer vision topics, and is most famous for work on perceptual grouping, shape perception, and object recognition. He's served as a department chair, so he's familiar with managing a group of talented and articulate people.

I saw Sven's introductory editorial in draft, and am delighted to have been flattered so thoroughly. I do think that *TPAMI*'s successes should be credited to the institution, which is enormous and diffuse as it has to be. *TPAMI* is truly fortunate in its authors, its referees, its AEs and its AEICs. The main challenge to the journal is coping reasonably quickly with the very large quantity of material that comes for review. We are lucky that our community is a fertile source of exciting intellectual creations and scientific discoveries. Many editorial boards would be quite happy to try and manage the rich supply of fine papers *TPAMI*'s board sees.

Coping with this flood of material is the duty of the large community of volunteers who find and promote strong papers. I can name the Associate Editors in Chief (AEIC's) over my term, Amir Globerson, Kristen Grauman, Sing-Bing Kang, Christoph Lampert, Kyoung-Mu Lee, Dale Schuurmans, Stan Sclaroff, Tinne Tuytelaars and Max Welling. Each has brought tremendous effort, skill, and professionalism to the role. Named elsewhere are the Associate Editors, who do much of the work of ensuring papers find the right referees. Too many to name are the referees and the authors. The journal flourishes through the efforts of all these volunteers, and I thank them.

I expect the journal to be running at a steady state of six AEIC's. Generally, AEIC's decide which papers should proceed to review (and write brief notes explaining why others should not, which is demanding work); allocate those papers to AE's; and advise me and correct my errors of commission and omission. Having a relatively large pool of AEIC's allows *TPAMI* to benefit from a broad range of expertise; allows the work to be done in shifts; and ensures that there is a broad pool of opinion for me to consult when I consider changes.

You will notice that the pool of AE's has expanded, too. I thank the new AE's for their courage. I thank current AE's for their hard work. Over the year some AE's have left us, and I thank them for their service and wish them productive uses for their new free time.

I can fill some of the remaining space with statistics. In 2014, *TPAMI* received 1,018 submissions and accepted 198 papers (I believe previous editorials have slightly misstated statistics; the number is the number of papers accepted in that year, rather than the number of that year's papers accepted as suggested in last year's editorial). In 2015, *TPAMI* received 987 submissions and accepted 219 papers. I think there is growth in the submission pool, as there is in the main vision conferences. Further evidence of this growth is a growing need for more pages in the printed version of the journal, which causes some delay between a paper being accepted—and so appearing on the web—and appearing in a physically printed version. Sven will get to deal with that issue.

I try to ensure the journal is efficient at handling papers, but frustrating delays do still occur, and evidence now supports the view that this situation is getting slightly worse, rather than slightly better. The average time from submission to first review has grown very slightly (3.2 months in 2015 versus 2.9 months in 2014), as has the average time from submission to decision for accepted papers (13 months in 2015 versus 12.8 in 2014). Papers do get marooned with forgetful AE's or inefficient referees. I chase the sources of delay fairly actively (you know who you are!), but it is difficult to compel volunteers to act as swiftly as one wants. I apologize to authors affected by delays, and I hope that Sven is more effective than I have been at chasing the tardy.

TPAMI is efficient at paper rejection: the average time from submission to final decision for rejected papers has shrunk (3.7 months in 2015 versus 5.0 months in 2014). I believe this to be the consequence of our rather ruthless desk rejection process. *TPAMI* desk rejects about a third of submissions, at the recommendation of either AE or AEIC, who must write a short explanation. I then review this explanation, and issue a decision. The usual reason for desk rejection is that the paper has too small a prospect of being accepted. I recognize that this is uncomfortable for authors, and that some decisions to desk reject may be mistaken. I believe this policy is a good balance between fairness and expedience. Desk rejection is a service to the community, because it ensures that precious referee time is efficiently spent.

It's been a great privilege to serve so fine an institution. I thank the *TPAMI* community, the professional staff at the Computer Society, who contribute to the efficient functioning of the journal in ways that only the EIC really sees, and my family for various acts of tolerance and support.

David A. Forsyth
Outgoing Editor in Chief



Sven Dickinson received the BSc degree in systems design engineering from the University of Waterloo, in 1983, and the MS and PhD degrees in Computer Science from the University of Maryland, in 1988 and 1991, respectively. He is currently professor of the Department of Computer Science with the University of Toronto, where he served as chair (2010-2015), acting chair (2008-2009), and vice chair (2003-2006). From 1995-2000, he was assistant professor of Computer Science with Rutgers University, where he held a joint appointment in the Rutgers Center for Cognitive Science (RuCCS) and membership in the Center for Discrete Mathematics and Theoretical Computer Science (DIMACS). From 1994-1995, he was a research assistant professor in the Rutgers Center for Cognitive Science, and from 1991-1994, a research associate in the Artificial Intelligence Laboratory, University of Toronto. He has held affiliations with the MIT Media Laboratory (visiting scientist, 1992-1994), the University of Toronto (visiting assistant professor, 1994-1997), the Computer Vision Laboratory of the Center for automation research with the University of Maryland (assistant research scientist, 1993-1994, visiting assistant professor, 1994-1997), and the University of California, Santa Barbara (visiting professor, 2010-2011, 2015-2016). Prior to his academic

career, he worked in the computer vision industry, designing image processing systems for Grinnell Systems Inc., San Jose, California, 1983-1984, and optical character recognition systems for DEST, Inc., Milpitas, California, 1984-1985. His research interests revolve around the problem of shape perception in computer vision and, more recently, human vision. Much of his recent work focuses on perceptual grouping and its role in image segmentation and shape recovery. He's introduced numerous qualitative shape representations, and their basis in symmetry provides a focus for his perceptual grouping research. His interest in multiscale, parts-based shape representations, and their common abstraction as hierarchical graphs, has motivated his research in inexact graph indexing and matching—key problems in object recognition, another broad focus of his research. His research has also explored many problems related to object recognition, including object tracking, vision-based navigation, content-based image retrieval, language-vision integration, and image/model abstraction. In 1996, He received the NSF CAREER award for his work in generic object recognition, and in 2002, received the Government of Ontario Premiere's Research Excellence Award (PREA), also for his work in generic object recognition. In 2012, he received the Lifetime Research Achievement Award from the Canadian Image Processing and Pattern Recognition Society (CIPPRS). In an effort to bring together researchers from human and computer vision, he was co-chair of the 1997, 1999, 2004, and 2007 IEEE International Workshops on Generic Object Recognition (or Object Categorization), which culminated in the interdisciplinary volume, *Object Categorization: Computer and Human Vision Perspectives*, in 2009, and was co-chair of the 2008, 2009, 2010, and 2011 International Workshops on Shape Perception in Human and Computer Vision, which culminated in the interdisciplinary volume, *Shape Perception in Human and Computer Vision: An Interdisciplinary Perspective*, in 2013. He was General co-chair of the 2014 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), and currently serves or has served on the editorial boards of the journals: the *IEEE Transactions on Pattern Analysis and Machine Intelligence*; the *International Journal of Computer Vision*; the *Computer Vision and Image Understanding*; the *Image and Vision Computing*; the *Graphical Models*; the *Pattern Recognition Letters*; the *IET Computer Vision*; and the *Journal of Electronic Imaging*. He is also co-editor of the *Synthesis Lectures on Computer Vision* from Morgan & Claypool Publishers, since its inauguration in 2009.