

# **Symposium on Electronic Imaging (EI 2024)**

Imaging and Multimedia Analytics at the  
Edge 2024

Burlingame, California, USA  
21-25 January 2024

ISBN: 979-8-3313-1266-4

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2024) by Society for Imaging Science & Technology  
All rights reserved.

Printed with permission by Curran Associates, Inc. (2025)

For permission requests, please contact Society for Imaging Science & Technology  
at the address below.

Society for Imaging Science & Technology  
7003 Kilworth Lane  
Springfield, Virginia 22151  
USA

Phone: 703-642-9090  
Fax: 703-642-9094

[info@imaging.org](mailto:info@imaging.org)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## TABLE OF CONTENTS

Adapt to Distill or Distill to Adapt .....	1
<i>Georgi Thomas, Andreas Savakis</i>	
Motion-based Domain Randomization for Detecting Honey bees Inside a Hive .....	7
<i>Chih-Hsing Ho, Izaak R. Gilchrist, Keirstyn A Amponsah, Amanda Stoltz, Brock A. Harpur, Steve Cantley, Amy R. Reibman</i>	
Self-Attention Enhanced Recognition: A Unified Model for Handwriting and Scene-text Recognition with Improved Inference .....	13
<i>Gaurav Patel</i>	
Generalizing Handwriting and Scene-Text Detection in Images .....	19
<i>Taewook Kim</i>	
Neuro-Symbolic Ensembles for Assistance at the Edge .....	25
<i>Yan-Ming Chiou, Dick Crouch, Bob Price, Jiaying Shen, Michael Youngblood, Charlie Ortiz</i>	
<b>Author Index</b>	