# **Awards Session**

December 3, 2013

# **Agenda**

- 1. ICCV13 best reviewer awards
- 2. ICCV13 prizes (Marr prize & honorable mentions)
- 3. TC awards committee and conflicts procedure
- 4. List of TC prizes and award committees
- 5. PAMI-TC Helmholtz Test of Time Awards
- 6. PAMI-TC Everingham Prize
- 7. PAMI-TC Significant Researcher Awards
- 8. PAMI-TC Rosenfeld Lifetime Achievement Award
- 9. Results of the PAMI-TC votes
- 10. Group Photos

# ICCV13 best reviewer awards

Relja Arandjelovic Minwoo Park

Terry Boult Robert Pless

Paolo Favaro

Alexander Shekhovtsov

Karen Simonyan

Michael Stark

Paulo Gotardo Roberto Tron

Michael Isard Andrea Vedaldi

Vladimir Kolmogorov Chaohui Wang

David Wipf
Diane Larlus

John Wright

Yong Jae Lee Qingxiong Yang

Thomas Mensink Stefanos Zafeiriou

Philippo s Mordohai Luca Zappella

Takayuki Okatani Bjorn Ommer

Carl Olsson

Matt Flagg

# **ICCV13 Marr Prize**

- Marr Prize committee
  - Pedro Felzenschwalb (Brown)
  - Guillermo Sapiro (Duke)
  - Rick Szeliski (Microsoft Research)
  - Yair Weiss (Hebrew)
  - Todd Zickler (Harvard)

# **ICCV13 Marr Prize**

- WINNER: From Large Scale Image Categorization to Entry-Level Categories
  - Vicente Ordonez (UNC Chapel Hill)
  - Jia Deng (Stanford)
  - Yejin Choi (Stony Brook)
  - Alexander Berg & Tamara Berg (UNC Chapel Hill)
- HONORABLE MENTION: Hierarchical Data-driven Descent for Efficient Optimal Deformation Estimation
  - Yuandong Tian & Srinivasa Narasimhan (CMU)
- HONORABLE MENTION: Piecewise Rigid Scene Flow
  - Christoph Vogel & Konrad Schindler (ETH Zurich)
  - Stefan Roth (TU Darmstadt)

Sponsors: Face++ and NICTA

# TC awards committee

#### Approved at CVPR13

#### Members:

- David Forsyth
- Bill Freeman
- Richard Hartley
- Jitendra Malik
- Cordelia Schmid
- Andrew Zisserman

Charge: set general policies, set up and chair ad hoc committees that actually give out the awards

Detailed conflicts policy described at TC meeting and on the web

# Major changes to awards

- As per the motion, the PC's at a conference give awards for papers at their conference
  - All other awards are given by the PAMI-TC awards committee and carry the "PAMI-TC" prefix
- We have increased the number of awards slightly since the scarcity was harmful
- We redid the ICCV "Test of Time" award and renamed it the "Helmholtz prize"
  - Inaugural awards for ICCV pre-2000

# Conflict policy

No one on the ad hoc committee that gives out an award is eligible for that award

The definition of a conflict is taken from NSF panels, and includes anyone you have published with in the last 4 years

A committee member with a conflict is prohibited from discussing the candidate they have a conflict with

An electronic voting system is used that prevents conflicted committee members from influencing that candidate

# 2013 ad hoc committees

- Lifetime & distinguished researcher: R. Hartley (chair), A. Blake, K. Grauman, K. Ikeuchi, T. Kanade, A. Levin, D. Ramanan, D. Terzopoulos
  - All are past award winners
- Everingham: A. Zisserman (chair), D. Forsyth, J. Malik, J. Sivic, L. Van Gool, C. Williams, J. Winn
  - All close colleagues of Mark Everingham
- Helmholtz: J. Malik (chair), D. Forsyth, C. Schmid, A. Zisserman
  - Special purpose committee for the inaugural prizes

# PAMI Helmholtz Test-of-Time Awards

For a paper published at an ICCV ten or more years ago



Hermann von Helmholtz (1821-1894)

Committee
Jitendra Malik (chair)
David Forsyth
Cordelia Schmid
Andrew Zisserman

 Michael Kass, Andrew Witkin, and Demetri Terzopoulos, Snakes: Active Contour Models, ICCV 1987

# Journal version:

 Michael Kass, Andrew P. Witkin, Demetri Terzopoulos: Snakes: Active contour models. International Journal of Computer Vision 1(4): 321-331 (1988)

Yehezkel Lamdan, Haim J. Wolfson,
 Geometric Hashing: A General and Efficient
 Model-Based Recognition Scheme, ICCV 1988
 927 cites

 Michael J. Swain, Dana H. Ballard: Indexing via color histograms. ICCV 1990

# Journal version:

• Michael J. Swain, Dana H. Ballard: Color indexing. International Journal of Computer Vision 7(1): 11-32 (1991)

• William T. Freeman, Edward H. Adelson: Steerable filters for early vision, image analysis, and wavelet decomposition. ICCV 1990

## Journal version:

• William T. Freeman, Edward H. Adelson: The Design and Use of Steerable Filters. IEEE Trans. Pattern Anal. Mach. Intell. 13(9): 891-906 (1991)

 Michael J Black, P. Anandan. A framework for the robust estimation of optical flow. ICCV 1993

## Journal Version

 Michael J. Black, P. Anandan. The Robust Estimation of Multiple Motions: Parametric and Piecewise-Smooth Flow Fields, Computer Vision and Image Understanding 63 (1), 75-104 1734 cites Vicent Caselles, Ron Kimmel, Guillermo
 Sapiro: Geodesic Active Contours. ICCV 1995

# Journal version:

• Vicent Caselles, Ron Kimmel, Guillermo Sapiro: Geodesic Active Contours. International Journal of Computer Vision 22(1): 61-79 (1997)

• Paul A. Viola, William M. Wells III: Alignment by Maximization of Mutual Information . ICCV 1995

# Journal version:

• Paul A. Viola, William M. Wells III: Alignment by Maximization of Mutual Information. International Journal of Computer Vision 24(2): 137-154 (1997)

• Richard I. Hartley: In Defence of the 8-Point Algorithm. ICCV 1995

# Journal version:

• Richard I. Hartley: In Defense of the Eight-Point Algorithm. IEEE Trans. Pattern Anal. Mach. Intell. 19(6): 580-593 (1997)

 Carlo Tomasi, Roberto Manduchi: Bilateral Filtering for Gray and Color Images. ICCV 1998

• Yossi Rubner, Carlo Tomasi, Leonidas J. Guibas: A Metric for Distributions with Applications to Image Databases. ICCV 1998

## Journal version:

• Yossi Rubner, Carlo Tomasi, Leonidas J. Guibas: The Earth Mover's Distance as a Metric for Image Retrieval. International Journal of Computer Vision 40(2): 99-121 (2000)

 Song Chun Zhu, Tai Sing Lee, Alan L. Yuille: Region Competition: Unifying Snakes, Region Growing, Energy/Bayes/MDL for Multi-band Image Segmentation. ICCV 1995

#### Journal Version:

 Song Chun Zhu, Alan L. Yuille: Region Competition: Unifying Snakes, Region Growing, and Bayes/MDL for Multiband Image Segmentation. IEEE Trans. Pattern Anal. Mach. Intell. 18(9): 884-900 (1996)

 David G. Lowe: Object Recognition from Local Scale-Invariant Features. ICCV 1999

## Journal version:

• David G. Lowe: Distinctive Image Features from Scale-Invariant Keypoints. International Journal of Computer Vision 60(2): 91-110 (2004)

Zhengyou Zhang: Flexible Camera
 Calibration by Viewing a Plane from Unknown
 Orientations. ICCV 1999

# Journal version:

• Zhengyou Zhang: A Flexible New Technique for Camera Calibration. IEEE Trans. Pattern Anal. Mach. Intell. 22(11): 1330-1334 (2000) 7391 cites

 Yuri Boykov, Olga Veksler, Ramin Zabih: Fast Approximate Energy Minimization via Graph Cuts. ICCV 1999

## Journal version:

• Yuri Boykov, Olga Veksler, Ramin Zabih: Fast Approximate Energy Minimization via Graph Cuts. IEEE Trans. Pattern Anal. Mach. Intell. 23(11): 1222-1239 (2001) 4058 cites

 Alexei A. Efros, Thomas K. Leung: Texture Synthesis by Non-parametric Sampling. ICCV 1999

# PAMI Mark Everingham Prize



- Annual award given to a researcher, or a team of researchers, who have made a selfless contribution of significant benefit to other members of the computer vision community.
- The Everingham Prize has been created to commemorate Mark Everingham who died in 2012, and to encourage others to follow in his footsteps by acting to further progress in the computer vision community as a whole.
- Mark Everingham's best known contribution is the organization of the PASCAL VOC datasets and challenges.
- The prize will be awarded at ICCV and ECCV. The winners are selected by the PAMI-TC awards committee, and the PAMI-TC provides the funding.

# PAMI Everingham Prize Winners 2013

- 2013 Prize committee: Andrew Zisserman (chair), David Forsyth, Jitendra Malik, Josef Sivic, Luc Van Gool, Chris Williams, John Winn
- As this is the inaugural year for the prize there is a backlog of outstanding potential candidates. Therefore, for this year two prizes have been awarded.

#### **Jonathon Phillips**

 For a series of datasets and challenges starting with FERET in the 1990s and extending to FRVT 2000-2016 and others.

#### OpenCV (Gary Bradski and team)

 For providing a huge wealth of open source software that has been of such benefit both inside and outside the computer vision field.

# Major Awards: Richard Hartley

# PAMI-TC Distinguished Researcher Award

#### Jitendra Malik

- > 60000 citations
- 2 Longuet-Higgins Awards
- National Academy of Engineering
- Known for his work on
  - Anisotropic diffusion
  - Normalized cuts
  - Shape contexts
  - Image based modeling





# PhD Students

- Paul Kube
- Pietro Perona
- Niklas Nordstrom
- Ziv Gigus
- Clark Olson
- David Jones
- Joseph Weber
- Ruth Rosenholtz
- Paul Debevec
- Christoph Bregler
- Jianbo Shi
- Chad Carson
- Yizhou Yu
- Thomas Leung
- Serge Belongie
- David Martin

- Alyosha Efros
- Laura Walker Renninger
- Gregory Mori
- Andras Ferencz
- Charless Fowlkes
- Alexander Berg
- Xiaofeng Ren
- Hao Zhang
- Andrea Frome
- Michael Maire
- Ashley Eden
- Lubomir Bourdev
- Chetan Nandakumar
- Subhransu Maji
- Chunhui Gu
- Jonathan Barron

# Postdoctoral Fellows

- Roberto Manduchi
- Dieter Koller
- Quang-Tuan Luong
- David Beymer
- Camillo Taylor
- Phil McLauclahan
- Jana Kosecka
- Jan Puzicha
- Yair Weiss

- Zuwhan Kim
- Stella Yu
- Erik Learned-Miller
- Eran Borenstein
- Pablo Arbelaez
- Bjorn Ommer
- Thomas Brox
- Cees Snoek
- Ross Girshick

# Mentors and Collaborators

- Thomas Binford, Jan Koenderink & David Mumford
- David Forsyth
- E. Adelson, P. Anandan, R. Bajcsy, T. Berg, R. Brooks, P. Cavanagh, T. Darrell, R. DeValois, O. Faugeras, W. T. Freeman, D. Geman, S. Geman, P. Hanrahan, B.K.P. Horn, M. Irani, M. Jordan, B. Julesz, T. Kanade, Y. LeCun, K. Nakayama, S. Nayar, Fei-Fei Li, A. Oliva, J. Ponce, R. Ramamoorthi, D. Ramanan, S. Sastry, H. Sawhney, C. Schmid, A. Torralba, A. Zisserman, S. C. Zhu

#### Pami-TC Distinguished Researcher Award.

#### Andrew Zisserman.

- > 60000 citations
- 3 Marr Prizes
- 1 Longuet-Higgins Award
- Fellow of the Royal Society

#### Known for his work on

- Multiple view geometry
- Object Recognition (video Google)
- Visual Reconstruction (Blake and Zisserman)



Pami-TC Distinguished Researcher Award.

Andrew Zisserman.





# Thanks to & impossible without ...

#### 1. (Ex) students who I have learnt from:

Relja Arandjelović, Martin Armstrong, Yusuf Aytar, Patrick Buehler, David Capel, Antonio Criminisi, Geoff Cross, Rob Fergus, Varun Gulshan, Pawan Kumar, David Liebowitz, Manuel Marin-Jimenez, Maria-Elena Nilsback, Andreas Opelt, Omkar Parkhi, Tomas Pfister, James Philbin, Lyndsey Pickup, Nic Pillow, Mukta Prasad, Phil Pritchett, Charles Rothwell, Frederik Schaffalitzky, Florian Schroff, Larry Shapiro, Karen Simonyan, Josef Sivic, Manik Varma, Oliver Whyte

# Thanks to & impossible without ...

2. (Ex) Post-docs and other (more senior) collaborators and colleagues:

Anandan, Paul Beardsley, Michael Black, Andrew Blake, Richard Bowden, Mike Brady, Stefan Carlsson, Larry Davis, Alyosha Efros, Jan-Olof Eklundh, Mark Everingham, Vitto Ferrari, Andrew Fitzgibbon, David Forsyth, Bill Freeman, Richard Hartley, Martial Hebert, Michael Irani, Michael Isard, C. V. Jawahar, Timor Kadir, Victor Lempitsky, Jitendra Malik, Jiri Matas, Krystian Mikolajczyk, Yael Moses, Joe Mundy, Shmuel Peleg, Pietro Perona, Marc Pollefeys, Jean Ponce, Deva Ramanan, Ian Reid, Cordelia Schmid, Steve Seitz, Rick Szeliski, Phil Torr, Bill Triggs, Tinne Tuytelaars, Luc Van Gool, Andrea Vedaldi, Tomas Werner, Yoni Wexler, Chris Williams, John Winn, Ramin Zabih

And to Olivier Faugeras & Jan Koenderink for inspiration

# Azriel Rosenfeld Lifetime Achievement Award

#### Jan Koenderink

- Differential geometry
- Structure from motion
- The structure of images
- Solid shape





