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Education UNIVERSITY OF CALIFORNIA, SAN DIEGO La Jolla, USA
Ph.D. Candidate, Computer Science, 2003 – present.
Research Area: *Computer Vision*
Advisor: Prof. David Kriegman

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY Mumbai, India
B.Tech. in Electrical Engineering, 1999 – 2003.

Research Experience

UNIVERSITY OF CALIFORNIA, SAN DIEGO La Jolla, USA
September 2003 – present
Graduate Student Researcher, Department of Computer Science and Engineering.

MICROSOFT RESEARCH Cambridge, UK
June 2006 – September 2006
Summer Intern, Machine Learning and Perception Group.

GRAZ UNIVERSITY OF TECHNOLOGY Graz, Austria
May 2002 – July 2002
Visiting Researcher, Institute of Electrical Measurement and Signal Processing (EMT).

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY Mumbai, India
July 2002 – May 2003
Undergraduate Researcher, Department of Electrical Engineering.

Journal Articles M.K. Chandraker, S. Agarwal, D.J. Kriegman and S. Belongie. *Globally Optimal Stratified Autocalibration*. IJCV 2008 (Marr Prize Special Issue). [invited]

F. Kahl, S. Agarwal, M.K. Chandraker, D.J. Kriegman and S. Belongie. *Practical Global Optimization for Multiview Geometry*. IJCV 2008.

Refereed Conference Papers

M.K. Chandraker and D.J. Kriegman. *Optimal Bilinear Programming for Computer Vision Applications*. CVPR 2008. [oral presentation, to appear]

M.K. Chandraker, S. Agarwal, D.J. Kriegman and S. Belongie. *Globally Optimal Affine and Metric Upgrades in Stratified Autocalibration*. ICCV 2007. [oral presentation]
[Marr Prize Honorable Mention]

A. Agarwal, M.K. Chandraker, S. Izadi and A. Blake. *High Precision Multi-touch Sensing on Surfaces using Overhead Cameras*. IEEE Tabletop 2007.

M.K. Chandraker, S. Agarwal and D.J. Kriegman. *ShadowCuts: Photometric Stereo with Shadows*. CVPR 2007.

M.K. Chandraker, S. Agarwal, F. Kahl, D. Nistér and D.J. Kriegman. *Autocalibration via Rank-Constrained Estimation of the Absolute Quadric*. CVPR 2007.

S. Agarwal, M.K. Chandraker, F. Kahl, D.J. Kriegman and S. Belongie. *Practical Global Optimization for Multiview Geometry*. ECCV 2006. [oral presentation]

M.K. Chandraker, F. Kahl and D.J. Kriegman. *Reflections on the Generalized Bas-Relief Ambiguity*. CVPR 2005. [oral presentation]

M.K. Chandraker, C. Stock and A. Pinz. *Real-Time Camera Pose in a Room*. ICVS 2003.

C. Stock, U. Muhlmann, M.K. Chandraker and A. Pinz. *Subpixel Corner Detection for Tracking Applications using CMOS Camera Technology*. AAPR 2002.

Honors

Honorable Mention for the David Marr Prize at IEEE International Conference on Computer Vision, 2007.

U.C. San Diego and Cal(IT)² Fellowship, 2003-04.

Nominated by IIT-Bombay for *Best Undergraduate Research Survey (Electrical Engineering)* on "Immersive Imaging and Super-Resolution", May 2002.

Ranked in top 30 in Indian National Chemistry Olympiad, 1999.

Certificate of Merit in International Chemistry Olympiad Training Camp, 1999.

Ranked 1st in state in Regional Mathematics Olympiad, 1998.

Ranked 2nd in India in Association of Mathematics Teachers of India's Mathematics Talent Tests, 1997.

National Talent Search Scholarship awarded by Government of India, 1997 (ranked 9th in state).

Skills

Programming Languages : C, C++, MATLAB, FORTRAN 77/95

Computing Platforms : Microsoft Windows, Linux, Solaris

Familiar with : x8(5/6) Assembly, MIPS Assembly

Relevant Coursework

Computer Vision - I (Image Analysis, Radiometry, SFM)

Computer Vision - II (Multiple View Geometry)

Computer Vision - III (Object Recognition)

Machine Learning

Graphical Models

Convex Optimization