

Shanmuganathan Raman

Research Scholar and Microsoft Research India Fellow

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OBJECTIVE

To excel in the Computer Vision and Graphics research by working in a highly motivated organization

EDUCATION

Indian Institute of Technology Bombay, Mumbai

July 2006 – Till Date, Course Work CPI – 8.93/10

PhD in Electrical Engineering

Research Area: Computer Vision and Graphics, Computational Photography

Advisor: Prof Subhasis Chaudhuri

Indian Institute of Technology Bombay, Mumbai

July 2004 – July 2006, CPI – 9.54/10

Master of Technology in Biomedical Engineering

Research Area: Computational Neuroscience

Thesis Title: Computational Investigation of the Mechanism of Synaptic Integration in Neurons

Advisor: Prof Rohit Manchanda

PSG College of Technology, Coimbatore

August 1999 – May 2003, CGPA – 9.5/10

Bachelor of Engineering in Electronics and Communication Engineering

Alagappa Matriculation Higher Secondary School, Karaikudi

June 1997 – May 1999, 95.08%

Higher Secondary Education

Alagappa Matriculation Higher Secondary School, Karaikudi

May 1997, 87.36%

Matriculation Examination

PUBLICATIONS

- ✓ **Shanmuganathan Raman** and Subhasis Chaudhuri, “A Matte-less, Variational Approach to Automatic Scene Compositing”, IEEE International Conference on Computer Vision (ICCV), Rio De Janeiro, Brazil, 2007
- ✓ **Shanmuganathan Raman** and Subhasis Chaudhuri, “Bilateral Filter based Compositing for Variable Exposure Photography”, Short Paper, European Association for Computer Graphics Conference (EUROGRAPHICS), Munich, Germany, 2009
- ✓ **Shanmuganathan Raman** and Subhasis Chaudhuri, “Poisson Compositing”, Sketch, ACM SIGGRAPH Asia, Yokohama, Japan, 2009
- ✓ **Shanmuganathan Raman**, Vishal Kumar, and Subhasis Chaudhuri, “Blind De-ghosting for Automatic Multi-exposure Compositing”, Poster, ACM SIGGRAPH Asia, Yokohama, Japan, 2009
- ✓ Nikhil Pande, **Shanmuganathan Raman**, and Subhasis Chaudhuri, “Illumination Compositing for Dark Scenes”, Poster, ACM SIGGRAPH Asia, Yokohama, Japan, 2009
- ✓ **Shanmuganathan Raman** and Subhasis Chaudhuri, “Low Dynamic Range Solutions to the High Dynamic Range Imaging Problem”, Poster, Microsoft Research India Techvista, Bangalore, India, 2010
- ✓ **Shanmuganathan Raman** and Subhasis Chaudhuri, “Low Dynamic Range Solutions to the High Dynamic Range Imaging Problem”, Second International Conference on Smart IT Applications, Qingdao, China, 2010 (Invited Paper)
- ✓ **Shanmuganathan Raman** and Subhasis Chaudhuri, “Bottom-up Segmentation for Ghost-free Reconstruction of a Dynamic Scene from Multi-exposure Images”, Indian Conference of Vision, Graphics and Image Processing (ICVGIP), Chennai, India, 2010 (Accepted)

PROFESSIONAL EXPERIENCE

Research Intern | Microsoft Research India, Bangalore

April 2008 – June 2008

Worked on the project “Multiple Kernel Learning: Learning to Predict Beauty” with Dr Manik Varma and Dr Lihi Zelnik-Manor

Assistant Systems Engineer | Tata Consultancy Services, Chennai

June 2003 – July 2004

Contributed to projects in insurance and banking domains

Undergraduate Trainee | HCL Infosystems, Pondicherry

April 2002 – May 2002

Contributed to the development of an automation software for the power recycling of PCs

ACADEMIC EXPERIENCE

Teaching Assistant | Indian Institute of Technology Bombay, Mumbai

July 2004 – July 2010

Courses: Computer Vision, Image Processing, Computational Methods, Communication Electronics Lab, Bioelectricity, Biomathematics

RELEVANT COURSES DONE AT IIT BOMBAY

Computer Vision, Image Processing, Statistical Signal Analysis, Adaptive Signal Processing, Matrix Computations, DSP and its Applications, Wavelets, Digital Message Transmission, Modern Information Systems, Medical Imaging Physics, Biostatistics, Bioelectricity, Signals and Systems, Physiology for Engineers

ORGANIZATION

Was part of the team which organized *CNS2005 - A Short Course on Computational Neuroscience* in IIT Bombay, October 8-16, 2005 sponsored by National Brain Research Centre (NBRC), India

AWARDS AND ACHIEVEMENTS

- ✓ Awarded Microsoft Research India PhD Fellowship for the year 2007
- ✓ Obtained 98.3 percentile in GATE 2004
- ✓ Ranked 136 (Top 2%) in Tamilnadu State Engineering Admissions in 1999
- ✓ Passed Rashtrabasha Praveen Examination conducted by Dhakshin Bharat Hindi Prachar Sabha

SKILLS

- ✓ Packages: Matlab, Mathematica
- ✓ Languages: C, C++
- ✓ Applications: LATEX, Adobe Photoshop
- ✓ Operating Systems: Windows, Linux
- ✓ System Administration for Vision & Image Processing Laboratory, IIT Bombay

REFERENCES

Dr Subhasis Chaudhuri
Dean (International Relations) and Professor,
Department of Electrical Engineering,
Indian Institute of Technology Bombay, India
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Dr Rohit Manchanda
Professor,
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Dr S Arunkumar
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