Chika Inoshita

Address: The Institute of Scientific and Industrial Research, Osaka University
8-1 Mihogaoka, Ibaraki, Osaka, 567-0047, Japan
Email: inoshita@am.sanken.osaka-u.ac.jp
Tel: +81-6-6879-8422

Objective:

To obtain fellowship in Microsoft Research Asia enabling growth and learning opportunities in research and analytic skills.

Interest:

Computer Vision and Image Processing

- Photometric analysis (scattering analysis, shape measurement)
- Physics based Vision
- Computational photography
- Image processing

Education:

- **Enroll Ph.D. Computer Science:** Graduate School of Information Science and Technology, Osaka University, Japan, Projected graduation in March 2015.
  Concentration in Computer Vision
- **M.S. Computer Science:** Graduate School of Information Science and Technology, Osaka University, Japan, 2012.
  Concentration in Computer Vision
  GPA: 3.75/4.0
- **B.S. Computer Science:** School of Engineering Science, Osaka University, Japan, 2010.
  Concentration in Image Processing
  GPA: 3.6/4.0
- **A.S. Information Engineering:** Takuma National College of Technology, Japan, 2008.
  Concentration in Mobile Application
  GPA: 3.85/4.0

Experience:

- **Ph. D. research,** Osaka University, Osaka, Japan 4/2012-
  - Join the project ``Safe visualization of 3-D human body structure using computational photography'' which is granted by the Japan Society for the Promotion of Science (JSPS) through the ``Funding Program for Next Generation

World-Leading Researchers (NEXT Program),'' initiated by the Council for Science and Technology Policy (CSTP).

- Design image improvement method for foggy image.

- **Master research**, Osaka University, Osaka, Japan 4/2010-3/2012
  - Join the project ``Safe visualization of 3-D human body structure using computational photography'' which is granted by the Japan Society for the Promotion of Science (JSPS) through the ``Funding Program for Next Generation World-Leading Researchers (NEXT Program),'' initiated by the Council for Science and Technology Policy (CSTP).
  - Design shape measurement method for translucent objects.
- **Internship**, Panasonic Electric Works Co., Osaka, Japan 8/2010-9/2010
  - Designed the appearance test method for tiny cracks on products.
  - Carried out some experiments to confirm the method and reported my achievement to fellows.
- **Bachelor research**, Osaka University, Osaka, Japan 4/2009-3/2010
  - Worked under advising of Professor Yasushi Yagi and Associate Professor Yasuhiro Mukaigawa.
  - Designed the ringing detector for image deblurring based on PSF analysis.

Publications:

[Journal papers (reviewed)]

1. C. Inoshita, S. Tagawa, M. A. Mannan, Y. Mukaigawa, Y. Yagi, ``Full-dimensional Sampling and Analysis of BSSRDF'', IPSJ Transactions on Computer Vision and Applications, Vol. 5, pp.119-123, 2013.
2. C. Inoshita, Y. Mukaigawa, Y. Yagi, ``Ringing Detector for Deblurring based on Frequency Analysis of PSF'', IPSJ Transactions on Computer Vision and Applications, Vol. 3, pp.236-247, 2011.

[International Conference (reviewed)]

1. C. Inoshita, Y. Mukaigawa, Y. Matsushita, Y. Yagi, ``Shape from Single Scattering for Translucent Objects'', 12th European Conference on Computer Vision (ECCV2012), 2012.

[Workshop (without review)]

1. C. Inoshita, Y. Mukaigawa, Y. Matsushita, Y. Yagi, ``Shape Estimation Based on Attenuation of Single Scattering for Translucent Objects'', The 7th International Workshop on Robust computer Vision, Jan., 2013.
2. C. Inoshita, Y. Mukaigawa, Y. Yagi, ``Shape Estimation Based on Attenuation of Single Scattering'', A Joint Workshop between Osaka-Univ. and Peking-Univ. Groups, Jul. 2011.

[Journal papers (reviewed, in Japanese)]

1. C. Inoshita, Y. Mukaigawa, Y. Matsushita, Y. Yagi, ``Shape Estimation of Translucent Objects based on Attenuation of Single Scattering'', IEICE Transactions on Information

and Systems, Vol. J95-D, No. 8, 2012.

[Domestic conference (reviewed, in Japanese)]

1. C. Inoshita, Y. Mukaigawa, Y. Yagi, ``Simultaneous Estimation of Shape and Scattering Parameters based on Single Scattering for Translucent Objects'', 15th Meeting on Image Recognition and Understanding (MIRU2012), 2012. (Oral, accepted rate: 37.2%)
2. C. Inoshita, Y. Mukaigawa, Y. Matsushita, Y. Yagi, ``Shape Estimation Based on Attenuation of Single Scattering for Translucent Objects'', 14th Meeting on Image Recognition and Understanding (MIRU2011), 2011. (Oral, accepted rate: 17.5%)
3. C. Inoshita, Y. Mukaigawa, Y. Yagi, ``Ringing Detector for Image Restoration'', 13th Meeting on Image Recognition and Understanding (MIRU2010), 2010. (Oral, accepted rate: 27.3%)

[Domestic conference (without review, in Japanese)]

1. C. Inoshita, S. Tagawa, MD. A. Mannan, Y. Mukaigawa, Y. Yagi, ``Full-dimensional Sampling and Analysis of BSSRDF'', 16 th Meeting on image Recognition and Understanding (MIRU2013), 2013. (Oral, accepted rate: 30.0%) ***[MIRU2013 Best Frontier Award]***
2. C. Inoshita, Y. Mukaigawa, Y. Yagi, ``Surface Shape Estimation based on Attenuation of Single Scattering for Translucent Objects'', Accomplishment Reports on Strategy Project of Nano-Macro Materials / Devices and System Research Alliance, 2012.
3. C. Inoshita, Y. Mukaigawa, Y. Yagi, ``Proposal on Ringing Detector for Image Restoration'', IPSJ Computer Vision and Image Media, 2010. ***[Best award at bachelor thesis session]***

[Magazine (in Japanese)]

1. C. Inoshita, Y. Mukaigawa, Y. Matsushita, Y. Yagi, ``Shape Estimation based on Attenuation of Single Scattering in Translucent Objects'', Image Laboratory (Japan Industrial Publishing), May, 2013.

Awards:

1. Best Frontier Award in MIRU2013, 8/2013.
2. Microsoft Research Fellowship Nomination Award, 10/2012.
3. Best survey award at young researcher program in MIRU2012, 8/9/2012.
4. Best award at bachelor thesis session in IPSJ Computer Vision and Image Media, 5/28/2010.
5. Encouraging prize in IEE/IPSJ/IEICE: the Regional Branch of Shikoku District, 3/18/2008.

Computer skills:

Languages: C(8 years), Matlab(3), Visual Basic(3), Perl(1), Java(1), Lisp(1), Pascal(1), Prolog(1), Octave(1)

Platforms: Windows(14), Linux[Ubuntu(3), Vine(3)], FreeBSD(1)

Libraries: OpenGL(1), OpenCV(2)

Foreign language skills:

English: TOEIC score 785 (November, 2011)

References:

Yasushi Yagi, Ph.D.
Professor at the Institute of Scientific and Industrial Research, Osaka University.
Address: 8-1 Mihogaoka, Ibaraki, Osaka, 567-0047, Japan
E-mail: yagi@am.sanken.osaka-u.ac.jp
Phone: +81-6-6879-8422

Yasuyuki Matsushita, Ph.D.
Lead researcher at Visual Computing Group, Microsoft Research Asia
Address: 13F, Building 2, No. 5 Dan Ling Street, Haidian District, Beijing, 100080, P.R.China
Email: yasumat@ microsoft.com