

# Masahiro Hirano

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## Personal Data

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website: <http://www.k2.t.u-tokyo.ac.jp/members/hirano/hirano-e.html>

## Research Interests

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Geometry Processing and its Application  
Computer Vision  
Intelligent Transportation Systems

## Work Experience

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| Apr 2018– <i>Current</i> | Project Assistant Professor<br><i>The University of Tokyo, Japan</i>   |
| Apr 2015–Mar 2018        | Research Fellow (DC1)<br><i>Japan Society for the Promotion of Science, Japan</i><br>Three years research fellowship for young scientists.                                       |
| Apr 2013–Mar 2015        | Technical Assistant at Ishikawa Watanabe Laboratory, <i>The University of Tokyo, Japan</i><br>Developed collision avoidance systems based on Networked High-speed Vision System. |
| Aug 2013                 | Summer Intern at Morgan Stanley MUFG Securities Co., Ltd.,<br>Japan<br>Worked with both Sales and Trading team and Technology team in Fixed Income Division.                     |

## Education

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| Apr 2015–Mar 2018 | Ph.D in Information Science and Technology<br>Graduate School of Information Science and Technology<br><i>The University of Tokyo, Japan</i><br>Supervisor: Prof. Masatoshi Ishikawa   |
| Apr 2013–Mar 2015 | Master in Information Science and Technology<br>Graduate School of Information Science and Technology<br><i>The University of Tokyo, Japan</i><br>Supervisor: Prof. Masatoshi Ishikawa |
| Apr 2009–Mar 2013 | Bachelor in Engineering<br>School of Engineering<br><i>The University of Tokyo, Japan</i><br>Supervisor: Prof. Koji Tsumura  |

## Publications

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### Journal

1. Masahiro Hirano, Akihito Noda, Masatoshi Ishikawa and Yuji Yamakawa:  
*Networked High-speed Vision for Evasive Maneuver Assist*,  
ICT express, Vol.3, No.4, pp.178-182, 2017.  
( DOI: <https://doi.org/10.1016/j.ict.2017.11.008> )
2. Masahiro Hirano, Yoshihiro Watanabe and Masatoshi Ishikawa:  
*Closed Curve Blending based on Curvature flow*,  
IPJS Journal, Vol.58, No.7, 2017 (in Japanese, recommended paper).  
( LINK: <http://id.nii.ac.jp/1001/00182656/> )
3. Masahiro Hirano, Yoshihiro Watanabe and Masatoshi Ishikawa:  
*Rapid blending of closed curves based on curvature flow*,  
Computer Aided Geometric Design (special issue of GMP2017), Vol.52-53C, pp.217-230, 2017.  
( DOI: <https://doi.org/10.1016/j.cagd.2017.03.005> )

### Conference

1. Masahiro Hirano, Yoshihiro Watanabe, Masatoshi Ishikawa:  
*Rapid blending of closed curves based on curvature flow*,  
International Conference on Geometric Modeling and Processing (GMP2017), 2017.  
( DOI: <https://doi.org/10.1016/j.cagd.2017.03.005> )
2. Masahiro Hirano, Yoshihiro Watanabe, Masatoshi Ishikawa:  
*Closed curve blending based on curvature flow*,  
The Symposium on Solid & Physical Modeling 2016 (SPM2016), Abstracts, 2016.  
( LINK: <http://www.k2.t.u-tokyo.ac.jp/members/hirano/spm2016.pdf> )
3. Masahiro Hirano, Yoshihiro Watanabe and Masatoshi Ishikawa:  
*3D Rectification of Distorted Document Image based on Tiled Rectangle Fragments*,  
In Proceedings of the 2014 IEEE International Conference on Image Processing (ICIP2014), pp.2604-2608, 2014.  
( DOI: <https://doi.org/10.1109/ICIP.2014.7025527> )
4. Masahiro Hirano, Akihito Noda, Yuji Yamakawa and Masatoshi Ishikawa:  
*Collision avoidance of Intelligent Vehicle based on Networked High-speed Vision System*,  
In Proceedings of the 11th International Conference on Informatics in Control, Automation and Robotics (ICINCO2014), Vol.2, pp.539-544, 2014.  
( DOI: <https://doi.org/10.5220/0005100105390544> )
5. Akihito Noda, Masahiro Hirano, Yuji Yamakawa and Masatoshi Ishikawa:  
*A Networked High-Speed Vision System for Vehicle Tracking*,  
In Proceedings of the 2014 IEEE Sensors Applications Symposium (SAS2014), pp.343-348, 2014.  
( DOI: <https://doi.org/10.1109/SAS.2014.6798973> )

And nine other domestic conference presentations.

## Awards & Honors

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- 2017 Best Presentation Award  
*The Society of Instrument and Control Engineers, System Integration Technical Division*
- 2016 IPSJ Yamashita SIG Research Award  
*Information Processing Society of Japan*  
Given to presenters of excellent papers in SIG proceedings. Ranked *No. 1* in computer graphics.
- 2015 Best Research Presentation Award  
*Information Processing Society of Japan, SIG. Computer Graphics and Visual Informatics*
- 2015 Scholarship Loan Repayment Exemption for Students with Excellent Record  
*Japan Student Service Organization (JASSO)*

## Teaching Experiences

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### Teaching Assistant

- Introduction to Design and Automation for Information Physics and Computing (2015,2016)  
Electronic Circuits II (2015)  
Seminar in Information Physics and Computing I (2014, 2015)  
Information Physics and Computing Laboratory II (2014)  
Information Physics and Computing Laboratory I (2013)  
Exercises in Information Physics and Computing I (2013)

## Scholarships

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- Apr 2013-Mar 2015 | Japan Student Service Organization (JASSO), Type I Scholarship  
Japan Student Service Organization (JASSO), Type II Scholarship

## Languages

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- English: Fluent  
Japanese: Native