

丁 明  
(Ding Ming)  
Curriculum Vitae

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生日: 1980 年 10 月 09 日

性别: 男

年龄: 39 岁

## Business address:

名古屋大学

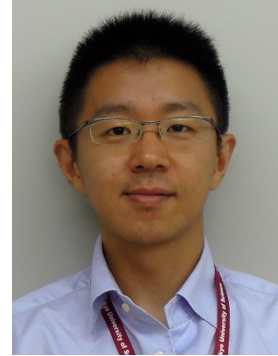
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## Professional interests:

机器人 (Robotics), 机器人控制 (Robot Control), 人机交互 (Human-Robot Interaction), 自动驾驶 (Autonomous Driving), 生物力学 (Biomechanics), 人体建模 (Human Modeling), 计算机视觉 (Computer Vision), ...

## Employment:

- **特任副教授 (esignated Associate Professor)**  
日本名古屋大学, 未来社会创造机构, Tier IV 自动驾驶设计中心

2019.11 ~ (现在)
- **客座副教授 (Visiting Associate Professor)**  
奈良先端科学技术大学院大学, 先端科学技术研究科, 信息科学领域, 机器人研究室

2019.11 ~ (现在)
- **助教 (Assistant Professor)**  
奈良先端科学技术大学院大学, 先端科学技术研究科, 信息科学领域, 机器人研究室

2015.05 ~ 2019.10
- **访问学者 (Visitor)**  
卡内基梅隆大学, 机器人学院

2017.11 ~ 2018.10
- **特任助教 (Designated Assistant Professor)**  
名古屋大学, 领军人才培养计划, 实世界数据循环学

2014.03 ~ 2015.04
- **研究员 (Researcher)**  
日本理化学研究所, RIKEN-TRI 人间共存机器人联合研究中心

2011.10 ~ 2014.02
- **博士后研究员 (Postdoctoral Researcher)**  
东京理科大学, 工学研究科

2010.04 ~ 2011.07

## Education:

- **博士 (工学)**      奈良先端科学技术大学院大学 (NAIST), 日本  
指导老师: 小笠原 司 教授      2007.04 ~ 2010.03
- **硕士 (工学)**      奈良先端科学技术大学院大学 (NAIST), 日本  
指导老师: 小笠原 司 教授      2005.04 ~ 2007.03
- **学士**              大阪产业大学 (OSU), 日本  
指导老师: 竹口 知男 教授      2003.04 ~ 2005.03
- **学士**              华东理工大学 (ECUST)  
指导老师: 林大 钧 教授      1998.09 ~ 2002.06

## Funding

- **日本学术振兴会, 科学研究费补助金, 青年研究 (B) (代表, 约 \$35,000)** 2017.04 ~ 2020.03  
(课题号: 23700782) 课题名: “ 利用能够测量和操作柔软物体的机器人进行情感感知 · 传递手法的研究”
- **日本学术振兴会, 科学研究费补助金, 青年研究 (B) (代表, 约 \$35,000)** 2011.04 ~ 2013.03  
(课题番号: 23700782) 课题名: “ 运动中踝关节的回转轴变位的解析及在防摔倒辅助装置中的应用”

## Awards and scholarships:

- **Best Paper Finalist**      Dec. 2012  
for “Design and Development of Stewart Platform-Type Assist Device For Ankle-Foot Rehabilitation” (2012 First International Conference on Innovative Engineering Systems (ICIES))
- **Best Paper in Biomimetics Finalist**      Dec. 2010  
for “Pinpointed Muscle Force Control in Consideration of Human Motion and External Force” (the 2010 IEEE International Conference on Robotics and Biomimetics (ROBIO2010))
- **IEEE Robotics and Automation Society Japan Chapter Outstanding Seed Technology Award**      Mar. 2010  
for “Pinpoint Muscle Rehabilitation and Training Method” (Robotics Forum 2010)
- **Honors Scholarship for Privately Financed International Students**      Apr. 2009 ~ Mar. 2010
- **Research Subsidy from CICP2007**      Sep. 2007 ~ Mar. 2008  
for: “Development of wearable exo-muscle type power-assisting device”
- **FUNAI Foreign Student Scholarship**      Apr. 2007 ~ Mar. 2008
- **FUNAI Foreign Student Scholarship**      Apr. 2005 ~ Mar. 2006
- **Best Paper Award**      Mar. 2005  
for graduation thesis: “A study of behavior learning by autonomous mobile robot”
- **Honors Scholarship for Privately Financed International Students**      Apr. 2003 ~ Mar. 2005
- **Scholarship for student of the year (ECUST)**      1999, 2000

## Publications:

### - Refereed Journal Papers -

1. S.-G. Cho, M. Yoshikawa, **Ming Ding**, J. Takamatsu, and T. Ogasawara, “Machine-learning-based hand motion recognition system by measuring forearm deformation with a distance sensor array”, *International Journal of Intelligent Robotics and Applications*, vol. 3, no. 4, pp. 418–429, 2019.
2. Lotfi El Hafi, **Ming Ding**, Jun Takamatsu, and Tsukasa Ogasawara, “STARE: Realtime, Wearable, Simultaneous Gaze Tracking and Object Recognition from Eye Images”, *SMPTE Motion Imaging Journal*, Vol. 126, No. 6, pp. 37-46, 2017.
3. Ahmed Asker, Samy F. M. Assal, **Ming Ding**, Jun Takamatsu, Tsukasa Ogasawara and A. M. Mohamed, “Modeling of natural sit-to-stand movement based on minimum jerk criterion for natural-like assistance and rehabilitation”, *Advanced Robotics*, Vol. 31, No. 17, pp. 901-917, 2017.
4. **Ming Ding**, Takamitsu Matsubara, Yoshihito Funaki, Ryojun Ikeura, Toshiharu Mukai and Tsukasa Ogasawara, “Generation of Comfortable Lifting Motion for a Human Transfer Assistant Robot”, *International Journal of Intelligent Robotics and Applications*, pp. 1-12, doi:10.1007/s41315-016-0009-z, 2017.
5. Keishi Ashida, Yoshifumi Morita, Ryojun Ikeura, Kiyoko Yokoyama, **Ming Ding**, and Yuki Mori, “Effective Rocking Motion for Inducing Sleep in Adults - Verification of Effect of Mother’s Embrace and Rocking Motion”, *Journal of Robotics, Networks and Artificial Life*, Vol. 1, No. 4, pp. 285-290, 2015.
6. Yuki Mori, Ryojun Ikeura, and **Ming Ding**, “Estimation of Care Receiver’s Position Based on Tactile Information for Transfer Assist Using Dual Arm Robot”, *Journal of Robotics and Mechatronics*, Vol. 26, No. 6, pp. 743-749, 2014.
7. Teru Yonezawa, Takayuki Onodera, **Ming Ding**, Hiroshi Mizoguchi, Hiroshi Takemura, Takeki Ogitsu, “Development of Three-dimensional Motion Measuring Device for the Human Ankle Joint by Using Parallel Link Mechanism”, *Engineering in Medicine and Biology Society (EMBC), 2014 36th Annual International Conference of the IEEE*, DOI 10.1109/EMBC.2014.6944589, pp.4358-4361, 2014.
8. William Gallagher, **Ming Ding**, Jun Ueda, “Relaxed Individual Control of Skeletal Muscle Forces via Physical Human-robot Interaction”, *Multibody System Dynamics*, DOI 10.1007/s11044-013-9362-y, 2013.
9. **Ming Ding**, Kotaro Hirasawa, Yuichi Kurita, Hiroshi Takemura, Hiroshi Mizoguchi, Jun Takamatsu and Tsukasa Ogasawara, “Pinpointed Muscle Force Control via Optimising Human Motion and External Force”, *International Journal of Mechatronics and Automation*, vol.2, no.3, pp.147-159, 2012.
10. Shinichiro Suzuki, Akira Chaki, Kentaro Sekiguchi, **Ming Ding**, Hiroshi Takemura, and Hiroshi Mizoguchi, “Effect of Reduced Plantar Sensation on Human Gaits on Various Terrains”, *Journal of Robotics and Mechatronics*, vol.23, no.2, pp.258-265, 2011.

11. Jun Ueda, **Ming Ding**, Vijaya Krishnamoorthy, Minoru Shinohara, and Tsukasa Ogasawara, "Individual Muscle Control Using an Exoskeleton Robot for Muscle Function Testing", *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, vol.18, no.4, pp.339-350, Aug. 2010.
12. **Ming Ding**, Jun Ueda and Tsukasa Ogasawara, "Pinpointed Muscle Force Control Using a Power-assisting Device", *Journal of the Robotics Society of Japan*, Vol. 27, No. 9, pp. 75-83, 2009 (in Japanese).
13. Shinji Kuriyama, **Ming Ding**, Yuichi Kurita, Jun Ueda and Tsukasa Ogasawara, "Flexible Sensor for McKibben Pneumatic Artificial Muscle", *International Journal of Automation Technology*, Vol. 3, No. 6, pp. 713-740, 2009.

### - Book Chapters -

1. Jun Ueda and **Ming Ding**, "Individual Control of Redundant Skeletal Muscles using an Exoskeleton Robot", *Redundancy in Robot Manipulators and Multi-Robot Systems, Lecture Notes in Electrical Engineering*, Edited by Dejan Milutinovic and Jacob Rosen, Springer, pp. 183-199, Vol. 57, ISBN 978-3-642-33970-7, 2013.

### - Refereed International Conference Proceedings Papers -

1. S.-G. Cho, T. Kurasumi, M. Yoshikawa, **Ming Ding**, J. Takamatsu, and T. Ogasawara, "Estimation of forearm pose based on upper arm deformation using a deep neural network", *the IEEE International Conference on Robotics and Biomimetics (ROBIO)*, pp. 1245-1250, Dec. 2019.
2. T. Sakuma, E. Phillips, G. A. G. Ricardez, **Ming Ding**, J. Takamatsu, and T. Ogasawara, "A parallel gripper with a universal fingertip device using optical sensing and jamming transition for maintaining stable grasps", *in Proceedings of the IEEE International Conference on Intelligent Robots and Systems (IROS)*, pp. 5814-5819, Nov. 2019.
3. A. Yuguchi, T. Inoue, G. A. Garcia Ricardez, **Ming Ding**, J. Takamatsu, and T. Ogasawara, "Real-time gazed object identification with a variable point of view using a mobile service robot", *the 28th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*, New Delhi, India, Oct. 2019.
4. T. Kurasumi, S.-G. Cho, **Ming Ding**, G. A. Garcia Ricardez, J. Takamatsu, and T. Ogasawara, "Simultaneous estimation of elbow joint angle and load based on upper arm deformation", *the 2019 IEEE International Conference on Cyborg and Bionic Systems (CBS)*, pp. 136-141, Sep. 2019.
5. M. Nagashima, S.-G. Cho, **Ming Ding**, G. A. Garcia Ricardez, J. Takamatsu, and T. Ogasawara, "Prediction of plantar forces during gait using wearable sensors and deep neural networks", *the 41th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, pp. 3629-3632, Jul. 2019.
6. T. Kiyokawa, **Ming Ding**, G. A. Garcia Ricardez, J. Takamatsu, and T. Ogasawara, "Generation of a tactile-based pouring motion using fingertip force sensors", *the 2019 IEEE/SICE International Symposium on System Integrations (SII)*, pp. 669-674, Paris, France, Jan. 2019.

7. S.-G. Cho, M. Yoshikawa, **Ming Ding**, J. Takamatsu, and T. Ogasawara, “Estimation of hand motion based on forearm deformation”, *2018 IEEE International Conference on Robotics and Biomimetics (ROBIO)*, pp. 2291–2296, Oct. 2018.
8. Daiki Yoshioka, **Ming Ding**, Gustavo Alfonso Garcia Ricardez, Jun Takamatsu and Tsukasa Ogasawara, “Scoop the semi-liquid objects using a spoon-equipped Robot arm for Meal Support”, *ASME 2018 Dynamic Systems and Control Conference (DSCC 2018)*, Atlanta, Georgia, USA, Sep. 2018.
9. **Ming Ding**, Ryuzo Baba, Kristada Masanthia, Gustavo Alfonso Garcia Ricardez, Jun Takamatsu and Tsukasa Ogasawara, “Estimation of the Operating Force from the Human Motion”, *the 40th International Engineering in Medicine and Biology Conference (EMBC 2018)*, Honolulu, USA, Jul. 2018.
10. Gustavo Alfonso Garcia Ricardez, Atsushi Ito, **Ming Ding**, Masahiro Yoshikawa, Jun Takamatsu, Yoshio Matsumoto and Tsukasa Ogasawara, “Wearable Device to Record Hand Motions based on EMG and Visual Information”, *the 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2018)*, Oulu, Finland, Jul. 2018.
11. Kenta Toyoshima, **Ming Ding**, Jun Takamatsu and Tsukasa Ogasawara, “What is Required for a Robot to Gently Stroke a Human using its Hand”, *ICRA2018 Workshop on Elderly Care Robotics Technology and Ethics*, Brisbane, Australia, May 21-25, 2018.
12. Lotfi El Hafi, **Ming Ding**, Jun Takamatsu, and Tsukasa Ogasawara, “Gaze Tracking and Object Recognition from Eye Images”, *2017 First IEEE International Conference on Robotic Computing (IRC 2017)*, Taichung, Taiwan, Apr. 2017.
13. Lotfi El Hafi, **Ming Ding**, Jun Takamatsu, and Tsukasa Ogasawara, “Gaze Tracking Using Corneal Images Captured by a Single High-Sensitivity Camera”, *2016 International Broadcasting Convention (IBC 2016)*, Amsterdam, Netherlands, Sep. 2016.
14. Takamitsu Matsubara, Yoshihito Funaki, **Ming Ding**, Tsukasa Ogasawara, and Kenji Sugimoto, “Data-Efficient Human Training of a Care Motion Controller for Human Transfer Assistant Robots using Bayesian Optimization”, *6th IEEE RAS & EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob 2016)*, Singapore, June. 26-29, 2016.
15. **Ming Ding**, Hiroki Nitta, Tatsuya Suzuki, “Machine Learning based Estimation of Driving Posture using Pressure Distribution Sensors”, *SICE Annual Conference 2015*, Hangzhou, China, July. 28-30, 2015 (Position Paper).
16. Keishi Ashida, Yoshifumi Morita, Ryojun Ikeura, Kiyoko Yokoyama, **Ming Ding**, and Yuki Mori, “Effective Rocking Motion for Inducing Sleep in Adults - Verification of Effect of Mother’s Embrace and Rocking Motion”, *the @015 International Conference on Artificial Life and Robotics (ICAROB2015)*, pp. 41-46, HorutoHall, OitaJan. 10-12, 2015.
17. **Ming Ding**, Ryojun Ikeura, Yuki Mori, Toshiharu Mukai and Shigeyuki Hosoe, “Lift-up Motion Generation of Nursing-care Assistant Robot Based on Human Muscle Force and Body Softness Estimation”, *2014 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM)*, Besancon, France, July. 8-11, 2014.

18. **Ming Ding**, Ryojun Ikeura, Yuki Mori, Toshiharu Mukai and Shigeyuki Hosoe, “Measurement of Human Body Stiffness for Lifting-Up Motion Generation Using Nursing-care Assistant Robot - RIBA”, *the 2013 IEEE Sensors Conference*, Baltimore, MD, USA, Nov. 4-6, 2013.
19. **Ming Ding**, Ryojun Ikeura, Toshiharu Mukai, Hiromichi Nagashima, Shinya Hirano, Kazuya Matsuo, Minghui Sun, Chang’ an Jiang and Shigeyuki Hosoe, “Comfort Estimation During Lift-up Using Nursing-care Robot - RIBA”, *2012 First International Conference on Innovative Engineering Systems (ICIES)*, Alexandria, Egypt, pp. 246-250, Dec. 6-9, 2012.
20. Takayuki Onodera, **Ming Ding**, Hiroshi Takemura and Hiroshi Mizoguchi, “Design and Development of Stewart Platform-Type Assist Device For Ankle-Foot Rehabilitation”, *2012 First International Conference on Innovative Engineering Systems (ICIES)*, Alexandria, Egypt, pp. 1-6, Dec. 6-9, 2012.
21. **Ming Ding**, Takayuki Onodera, Ryojun Ikeura, Hiroshi Takemura and Hiroshi Mizoguchi, “Position, Force and Stiffness Control of a Stewart-Platform-Type Ankle-Foot Assist Device”, *the 2012 Dynamic Systems and Control Conference (DSCC’12)*, Ft. Lauderdale, FL, USA, Oct. 17-19, 2012.
22. **Ming Ding**, Tomohiro Iida, Hiroshi Takemura and Hiroshi Mizoguchi, “Displacement Estimation for Foot Rotation Axis Using a Stewart-Platform-Type Assist Device”, *4th International Conference on Intelligent Robotics and Applications (ICIRA2011)*, Aachen, Germany, Part I, LNAI 7101, pp. 221–229, 2011.
23. Ryosuke Osaki, Hiroshi Takemura, **Ming Ding**, Hiroshi Hyodo, Kohei Soga and Hiroshi Mizoguchi, “3D Bioimaging Sensor of Breast Cancer Cell Using Rare-earth-doped Ceramic Nanophosphors and Near-infrared”, *the 2011 IEEE Sensors Conference*, Limerick, Ireland, pp. 1784-1787, October 28-31, 2011.
24. **Ming Ding**, Takayuki Onodera, Hiroshi Takemura and Hiroshi Mizoguchi, “Development of a New Foot-ankle Assist Device with Stewart Platform Mechanism”, *2011 International Biomechanics Conference and Annual Meeting of Taiwanese Society of Biomechanics (TBS2011)*, Taiwan, October 20-21, 2011.
25. Satoshi Kudoh, **Ming Ding**, Hiroshi Takemura, and Hiroshi Mizoguchi, “Improvement of Plantar Tactile Sensitivity by Stochastic Resonance for Prevention of Falling”, *the 4th International Congress on Image and Signal Processing (CISP2011)*, Shanghai, China, pp. 187-190, October 15-17, 2011.
26. Yusuke Kitano, **Ming Ding**, Hiroshi Takemura, and Hiroshi Mizoguchi, “Constant Execution Time Multiple Human Detector Regardless of Target Number Increase Based on HLAC”, *the 2011 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM2011)*, Budapest, Hungary, pp. 13-18, July 3-7, 2011.
27. **Ming Ding**, Kotaro Hirasawa, Yuichi Kurita, Hiroshi Takemura, Jun Takamatsu, Hiroshi Mizoguchi and Tsukasa Ogasawara, “Pinpointed Muscle Force Control in Consideration of Human Motion and External Force”, *the 2010 IEEE International Conference on Robotics and Biomimetics (ROBIO2010)*, Tianji, China, pp. 739-744, December 14-18, 2010.

28. Shinichiro Suzuki, Akira Chaki, **Ming Ding**, Hiroshi Takemura and Hiroshi Mizoguchi, “Influence of Plantar Insensitive for Human Gait in Even and Uneven Terrain”, *the 1st International Conference on Applied Bionics and Biomechanics (ICABB2010)*, Venice, Italy, October 14-16, 2010.
29. **Ming Ding**, Yuichi Kurita, Jun Ueda, and Tsukasa Ogasawara, “Pinpointed Muscle Force Control Taking Into Account the Control DOF of Power-assisting Device”, *the 2010 Dynamic Systems and Control Conference (DSCC’10)*, Cambridge, Massachusetts, September 13-15, 2010.
30. Shinji Kuriyama, **Ming Ding**, Yuichi Kurita, Jun Ueda, Tsukasa Ogasawara, “Flexible Sensor for McKibben Pneumatic Actuator”, *the 2009 IEEE Sensors Conference*, Christchurch, New Zealand, October 25-28, 2009.
31. Jun Ueda, Moiz Hyderabadwala, **Ming Ding**, Tsukasa Ogasawara, Vijaya Krishnamoorthy and Minoru Shinohara, “Individual Muscle Control using an Exoskeleton Robot for Muscle Function Testing”, *the 2009 Dynamic Systems and Control Conference (DSCC’09)*, Hollywood, California, October 12-14, 2009.
32. **Ming Ding**, Jun Ueda and Tsukasa Ogasawara, “Pinpointed Muscle Force Control Using a Power-Assisting Device: System Configuration and Experiment”, *the 2nd IEEE / RAS-EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob 2008)*, pp. 181-186, Scottsdale, USA, October 19-22, 2008.
33. **Ming Ding**, Jun Ueda and Tsukasa Ogasawara, “Development of MAS - a system for pin-pointed muscle force control using a power-assisting device”, *the 2007 IEEE International Conference on Robotics and Biomimetics (Robio2007)*, pp. 1463-1469, Sanya, China, December 15-18, 2007.
34. Jun Ueda, **Ming Ding**, Masayuki Matsugashita, Reishi Oya and Tsukasa Ogasawara, “Pin-pointed control of muscles by using power-assisting device”, *the 2007 IEEE International Conference on Robotics and Automation (ICRA 2007)*, pp. 3821-3828, Roma, Italy, April, 2007.

## Books

1. Yugui, (丁明, 吕嘉 译), “Ruby 语言入门”, 东南大学出版社, ISBN: 9787564121341, 2010.

## Patents

1. Jun ueda, Tsukasa Ogasawara, **Ming Ding**, “Driving force calculating device, driving force calculating method, power”, *USA Patent 7529632*, 2009.

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