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Award Ceremony

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Welcome note by ShanghaiTech President

Dr. Mianheng Jiang

SSRR 2017 in 10 slides

Sören Schwertfeger
General Chair SSRR 2017

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15th IEEE SSRR

- 2017 in Shanghai, China
- 2016 in Lausanne, Switzerland
- 2015 in West Lafayette, In, USA
- 2014 in Toyako-cho, Hokkaido, Japan
- 2013 Linköping, Sweden
- 2012 in Texas, USA
- 2011 in Kyoto, Japan
- 2010 in Bremen, Germany
- 2009 in Denver, US
- 2008 in Sendai, Japan
- 2007 in Rome, Italy
- 2006 in Gaithersburg, MD, USA
- 2005 in Kobe, Japan
- 2004 in Bonn, Germany
- 2003 Tampa, Florida, USA

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Committee

- **General Chair:**
  - **Sören Schwertfeger**, ShanghaiTech University
- **Program Chair:**
  - **Kazunori Ohno**, Tohoku University
- **International Program Committee:**
  - **Brittany Duncan**, University of Nebraska-Lincoln
  - **Gerald Steinbauer**, Graz University of Technology
  - **Shaojie Shen**, Hong Kong University of Science and Technology
- **Local Arrangements Committee:**
  - **Weidong Chen**, Shanghai Jiao Tong University
  - **Hong Lu**, Fudan University
  - **Xinyu Zhang**, East China Normal University
  - **Jie Lu**, ShanghaiTech University
  - **Boris Houska**, ShanghaiTech University

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Thank you!

- Shanghai Mihoo Branding & Creative Design Company
  - Jian Shi
- ShanghaiTech University and School of Information Science and Technology (SIST)
- ShanghaiTech University
- Student ”Volunteers”
  - Xu Qingwen
  - Zhi Xiangyang
  - Hou Jiawei
  - Shan Zheyong
  - Haofei Kuang
  - Hongyu Chen
  - Xiaoling Long

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Thank you!

- Team NuBot
  - National University of Defense Technology
- Shanghai Gaussian Robotics
  - Edward Cheng
  - Le Song
- Dong Tian (Patrick)
  - Lab Technician Sören Schwertfeger and Andre Rosendo

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Best Job – Most Work:

Thank You!!!

Ying Xue
Yongxia Shen

ShanghaiTech University

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Review Process

- Submissions due date: July 7
- Notification date: August 12
- => Review process finished in just 5 weeks!

- 121 reviews => 2.2 reviews per paper; 1.9 reviews per reviewer

63 Reviewers

Birk, Andreas	ito, kazuyuki	Neira, José	Sa, Inkyu
Bradley, Justin	Kamegawa, Tetsushi	Nuechter, Andreas	Saito, Carlos
Brüggemann, Bernd	Kamezaki, Mitsuhiro	Ogren, Petter	Saripalli, Srikanth
Cadena Lerma, Cesar	Kimura, Tetsuya	Ohno, Kazunori	Sato, Noritaka
Chen, Hao	Kinugasa, Tetsuya	Okada, Yoshito	Schwertfeger, Sören
Chen, Weidong	Kosmatopoulos, Elias	Okugawa, Masayuki	Sheh, Raymond Ka-Man
de la Escalera, Arturo	Liu, Ming	Oliva, Gabriele	Shen, Shaojie
Delmerico, Jeffrey	Loianno, Giuseppe	Onosato, Masahiko	Steinbauer, Gerald
Detweiler, Carrick	Ma, Lu	Parasuraman, Ramviyas	Surmann, Hartmut
Duncan, Brittany	Martinez, Jorge L.	Peschel, Joshua	Takamatsu, Jun
Fink, Jonathan	Murphy, Robin	Pfingsthorn, Max	Wagner, Bernardo
Fregene, Kingsley	Muscato, Giovanni	Portugal, David	Wu, Amy
Gasteratos, Antonios	Nagatani, Keiji	Rahiman, Wan	Xiao, Junhao
Hashimoto, Kenji	Nakanishi, Hiroaki	Reardon, Christopher M.	ZHANG, Xinyu
Houska, Boris	Nalpantidis, Lazaros	Rohmer, Eric	Zhao, Lanying
Ishigami, Genya	Nardi, Daniele	Romero, Roseli Ap. Francelin	

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Papers

- Papers submitted: 51; accepted: 36
- Late breaking reports submitted: 5; accepted: 4
- Acceptance rate: 71%

Country	Authors	Submissions	Accepted
Japan	75	15	11
China	21	9	4
United States of America	35	8	8
Switzerland	20	5	4
Germany	17	4	4
Korea, South	8	3	1
Spain	8	2	2
Sweden	6	2	2
Australia	1	1	1
Greece	4	1	1
Italy	0	1	0
Malaysia	0	1	0
Pakistan	0	1	0
Peru	5	1	1
Portugal	4	1	1
United Kingdom	0	1	0
Canada	1	0	0
Taiwan	1	0	0
Totals	**206**	**56**	**40**

SSRR 2017 Keywords Breakdown for the Profiles Contributed papers, Late Breaking Results	Keyword count			
Keyword	1st	2nd	3rd	total
Unmanned ground, aerial, and marine vehicles*	7	4	11	22
Robotics and Automation for safety and security*	7	8	7	22
Autonomous search and rescue*	7	3	4	14
Sensing and sensor fusion*	6	4	3	13
Intelligent behaviors to improve robot performance and survivability*	3	6	4	13
Perception for navigation, hazard detection, and victim identification*	4	6	3	13
SLAM in complex and/or extreme environments*	5	3	1	9
Human-robot interaction and interfaces*	5	3	0	8
Inspection of critical infrastructure*	1	6	1	8
Mechanisms, Mechatronics, and Embedded Control*	4	2	2	8
Multi-agent coordination*	3	3	1	7
Safety standards for robots and systems*	2	0	1	3
Emerging technologies (sensors, power sources, micro robots, etc)*	1	1	1	3
Novel sensors and mechanisms*	0	1	0	1
Manipulation*	0	0	1	1
Nuclear decommissioning*	1	0	0	1
Casualty assessment, care and extraction*	0	1	0	1
Structural assessment*	0	0	1	1
Totals	56	51	41	148

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SSRR 2017 Competition

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Winners

- Winner: Team NuBot; National University of Defense Technology
  - Junhao Xiao, Xieyuanli Chen, Yi Li, Qihang Qiu, Ruoyi Yan
- Best Integrated Robot:
  - Gang Chen, Jiaxing University
- Most Innovative Robot: Team Geekpie-Robotics; ShanghaiTech U.
  - Zhijie Yang, Zehao Zhao, Junyan Su, Yiming Yin, Hankai Liu
- Fastest Robot:
  - Raymond Sheh; Curtin University
- Best Design: STAR Rescue Team; ShanghaiTech University
  - Shan Zeyong, Xu Qingwen, Zhi Xiangyang, Bai Song, Li Ruijian, Hongyu Chen, Haofei Kuang, Xiaoling Long, Sören Schwertfeger

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SSRR 2017 Awards

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Finalists selection: Program Committee

Kazunori Ohno	Japan	Tohoku University
Brittany Duncan	USA	University of Nebraska, Lincoln
Gerald Steinbauer	Austria	Graz University of Technology
Shaojie Shen	Hong Kong	Hong Kong University of Science and Technology
Sören Schwertfeger	China	ShanghaiTech University

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Award Committee

Brittany Duncan	USA	University of Nebraska, Lincoln
Jorge L. Martinez	Spain	University of Malaga
Masayuki Okugawa	Japan	Aichi Institute of Technology
Andre Rosendo	China	ShanghaiTech University
Sören Schwertfeger	China	ShanghaiTech University

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Procedure

- Finalists please come to the front to take a photo together
- Then take a photo with the winner

- Prize money will be wire transferred from IEEE once the necessary tax information form has been filled out – contact Sören Schwertfeger.

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Best Late Breaking Report

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Finalists for the Best Late Breaking Report

- Jacoff, Adam; Candell, Richard; Downs, Anthony; Huang, Hui-Min; Kimble, Kenneth; Saidi, Kamel; Sheh, Raymond Ka-Man; Virts, Ann-Marie
  Events for the Application of Measurement Science to Evaluate Ground, Aerial, and Aquatic Robots

- Kimura, Tetsuya; Okugawa, Masayuki; Oogane, Katsuji; Ohtsubo, Yoshikazu; Shimizu, Masaru; Takahashi, Tomoichi; Tadokoro, Satoshi
  Competition Task Development for Response Robot Innovation in World Robot Summit

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Best Late Breaking Report Award: USD 200

- Kimura, Tetsuya; Okugawa, Masayuki; Oogane, Katsuji; Ohtsubo, Yoshikazu; Shimizu, Masaru; Takahashi, Tomoichi; Tadokoro, Satoshi **Competition Task Development for Response Robot Innovation in World Robot Summit**

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Best Student Paper Award

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Finalists for the Best Student Paper

- Benndorf, Maik; Garsch, Maximilian; Mueller, Christian Atanas; Fromm, Tobias; Haenselmann, Thomas; Gebbeken, Norbert; Łuczyński, Tomasz; Birk, Andreas
  Robotic Bridge Statics Assessment within Strategic Flood Evacuation Planning Using Low-Cost Sensors
- Mielle, Malcolm; Magnusson, Martin; Andreasson, Henrik; Lilienthal, Achim J.
  SLAM Auto-Complete: Completing a Robot Map Using an Emergency Map
- Zeise, Björn; Wagner, Bernardo
  Tempered Point Clouds and OctoMaps: A Step towards True 3D Temperature Measurement in Unknown Environments
- Dufek, Jan; Xiao, Xuesu; Murphy, Robin
  Visual Pose Stabilization of Tethered Small Unmanned Aerial System to Assist Drowning Victim Recovery
- Bähnemann, Rik; Schindler, Dominik; Kamel, Mina; Siegwart, Roland; Nieto, Juan
  A Decentralized Multi-Agent Unmanned Aerial System to Search, Pick Up, and Relocate Objects

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Best Student Paper Award: USD 400

- Mielle, Malcolm; Magnusson, Martin; Andreasson, Henrik; Lilienthal, Achim J.
  SLAM Auto-Complete: Completing a Robot Map Using an Emergency Map

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Best Paper Award

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Finalists for the Best Paper

- Baberg, Fredrik; Ogren, Petter
  Formation Obstacle Avoidance using RRT and Constraint Based Programming
- Sakaue, Tomoki; Yoshino, Shin; Nishizawa, Koju; Takeda, Kohei
  Survey in Fukushima Daiichi NPS by Combination of Human and Remotely-Controlled Robot
- Gawel, Abel Roman; Dubé, Renaud; Surmann, Hartmut; Nieto, Juan; Siegwart, Roland; Cadena Lerma, Cesar
  3D Registration of Aerial and Ground Robots for Disaster Response: An Evaluation of Features, Descriptors, and Transformation Estimation
- Wellhausen, Lorenz; Dubé, Renaud; Gawel, Abel Roman; Siegwart, Roland; Cadena Lerma, Cesar
  Reliable Real-Time Change Detection and Mapping for 3D LiDARs

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Best Paper Award: USD 500

- Gawel, Abel Roman; Dubé, Renaud; Surmann, Hartmut; Nieto, Juan; Siegwart, Roland; Cadena Lerma, Cesar
  3D Registration of Aerial and Ground Robots for Disaster Response: An Evaluation of Features, Descriptors, and Transformation Estimation

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Congratulations

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