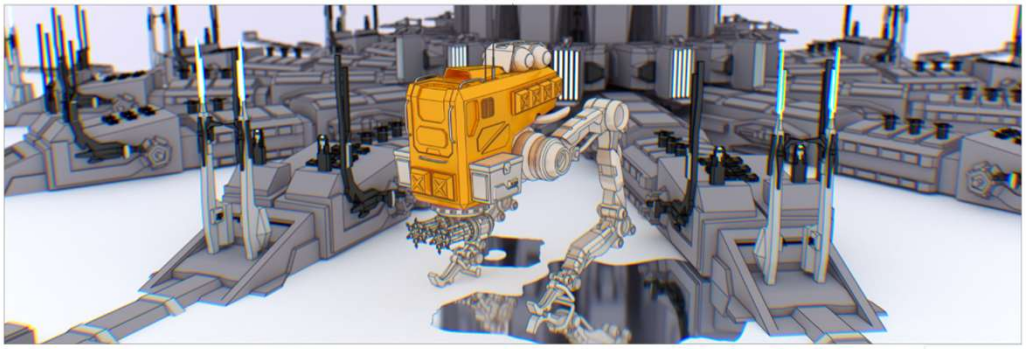
ASIAGRAPHICS
Asian Association for Computer Graphics and Interactive Technology

Newsletter

Issue 3, December 2021



www.asiagraphics.org

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(Special Issue on 2021 Annual Report of AG)

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(**Term of office**: January 1, 2021 – December 31, 2022)

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Chairman

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AG Awards

Life-Time Achievement Award

This award will be given every second year to an exceptionally distinguished scientist in the area of Computer Graphics. The awardee should be a renowned personality who has made significant scientific contributions over a long period of their scientific career and who has also been instrumental in promoting the field as a scientific discipline by creating international visibility through the organization of conferences or journals.

Outstanding Technical Contributions Award

This award is to recognize an individual for an outstanding technical achievement in computer graphics, made in an Asiagraphics country, and will be given at most one per year.

Young Researcher Award

This award is to recognize young researchers early on in their career (not longer than 6 years after obtaining the PhD degree), who have made a recently, notable contribution to the field of computer graphics and interactive techniques, in an Asiagraphics country, and will be given at most one per year.

AG Awards @ Previous Years

Life-Time Achievement Awardees

(2017)
Tomoyuki Nishita
Univ. of Tokyo, Japan

(2019)
Sung Yong Shin
KAIST, Korea

Outstanding Technical Contributions Awardees

(2018)
Baining Guo
MSRA, China

(2019)
Hujun Bao
Zhejiang Univ., China

(2020)
Takeo Igarashi
Univ. of Tokyo, Japan

Young Researcher Awardees

(2018)
Nobuyuki Umetani
Univ. of Tokyo, Japan

(2019)
Ruizhen Hu
Shenzhen Univ., China

(2020)
Lin Gao
CAS, China

AG Awards @ 2021

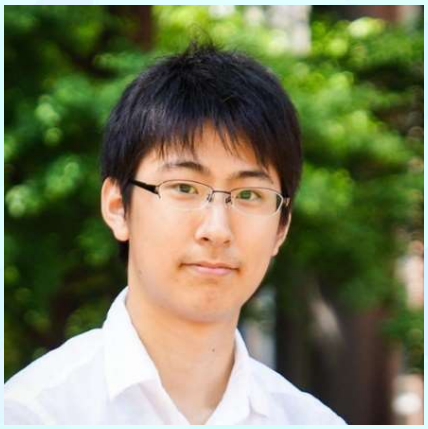
Life-Time Achievement Awardees

Qunsheng Peng
Zhejiang University

Outstanding Technical Contributions Awardees

Wenping Wang
Texas A&M University, USA and The University of Hong Kong, China

Young Researcher Awardees



Yuki Koyama
National Institute of Advanced Industrial Science and Technology, Japan

AG Conferences

http://www.asiagraphics.org/conferences-events/

Pacific Conference on Computer Graphics and Applications (PG)

Web: http://www.asiagraphics.org/pg/

Steering Committee

- Seungyong Lee (POSTECH, Korea) [chair]
- Wenping Wang (University of Hong Kong, China) [Founding and Previous Chair]
- Hujun Bao (Zhejiang University, China)
- Robin Bing-Yu Chen (National Taiwan University, China)
- Shi-Min Hu (Tsinghua University, China)
- Myung-Soo Kim (Seoul National University, Korea)
- Leif Kobbelt (RWTH Aachen University, Germany)
- Tomoyuki Nishita (University of Tokyo, Japan)
- Hiromasa Suzuki (University of Tokyo, Japan)

International Conference on Geometric Modeling and Processing (GMP)

Web: http://www.asiagraphics.org/gmp/

Steering Committee

- Kai Hormann (Università della Svizzera italiana, Switzerland) [chair]
- Shi-Min Hu (Tsinghua University, China)
- Bert Jüttler (Johannes Kepler University Linz, Austria)
- Myung-Soo Kim (Seoul National University, Korea)
- Ligang Liu (University of Science and Technology of China)
- Kenji Shimada (Carnegie Mellon University, USA)
- Scott Schaefer (Texas A&M University, USA)
- Wenping Wang (The University of Hong Kong)

The Computational Visual Media Conference (CVM)

Web: http://iccvm.org/

Founder

- Shi-Min Hu (Tsinghua University, China)

AG Conferences @ 2021

CVM 2021

- Website: http://www.kma.zcu.cz/gmp2021

The 9th international conference on Computational Visual Media (CVM 2021) was held on Apr 21 to Apr 23, 2021, in Qingdao, China, with a combination of online and offline. It was organized by Shandong University and Shandong Technology & Business University. More than 250 participants attended the conference in Qingdao, and more than 1000 people joined online.

The conference included 3 keynote speeches, 41 conference paper presentations in 13 sessions, 3 special forums and 1 poster session.

(By Lin Lu, CVM 2021 Organizing Co-Chair, Shandong University, China)

AG Conferences @ 2021

GMP 2021

- Website: http://www.kma.zcu.cz/gmp2021

The 15h International Conference on Geometric Modeling and Processing (GMP 2021), was held online on May 12, 2021, organized by the University of West Bohemia in Czech Republic.

As trends and methodologies in geometry continue to evolve, GMP continues to provide a premier venue for sharing work that advances cutting-edge, creative and rigorous techniques for geometric modeling and processing. The GMP 2021 conference received 48 complete submissions, among which, 17 submissions have been accepted and published in a special issue of Computer-Aided Geometric Design (CAGD, Elsevier), while 5 submissions have been forwarded to the CAGD journal for a fast track review.

Due to the global pandemic, GMP 2021 was organized as a teleconference. The program of this conference included a keynote speech, 17 conference paper presentations and 2 journal paper presentations in 5 sessions. The keynote speaker is Annalisa Buffa from Swiss Federal Institute of Technology Lausanne (EPFL).

(By Renjie Chen, GMP2021 Program Co-Chair, University of Science and Technology of China, China)

AG Conferences @ 2021

PG 2020+2021

- Website: https://www.pg2021.org

The 28th and 29th Pacific Conference on Computer Graphics and Applications (Pacific Graphics 20+21) were jointly held online in Wellington, New Zealand from October 18 to 21, 2021.

There were 28 presentation sessions, including 3 keynote speeches, 20 technical paper presentation sessions and 5 feature sessions. There were 15 journal paper presentation sessions to accommodate PG2020 full papers, PG2021 full papers and several invited TVCG papers, and 5 conference track paper sessions for PG2020 and PG2021 short papers, work-in-progress papers and posters.

In the closing ceremony of PG20+21, Prof. Shi-Min Hu announced the Life-time Achievement award 2021, Outstanding Technical Contribution award 2020 and 2021 of Asia Graphics Association.

(By Fang-Lue Zhang, PG2020 & PG2021 Program Co-Chair, Victoria University of Wellington, New Zealand)

AG Conferences @ 2022

CVM 2022

- Date: April 7-9, 2022
- Venue: Tsinghua University, Beijing, China
- Website: http://iccvm.org/2022

GMP 2022

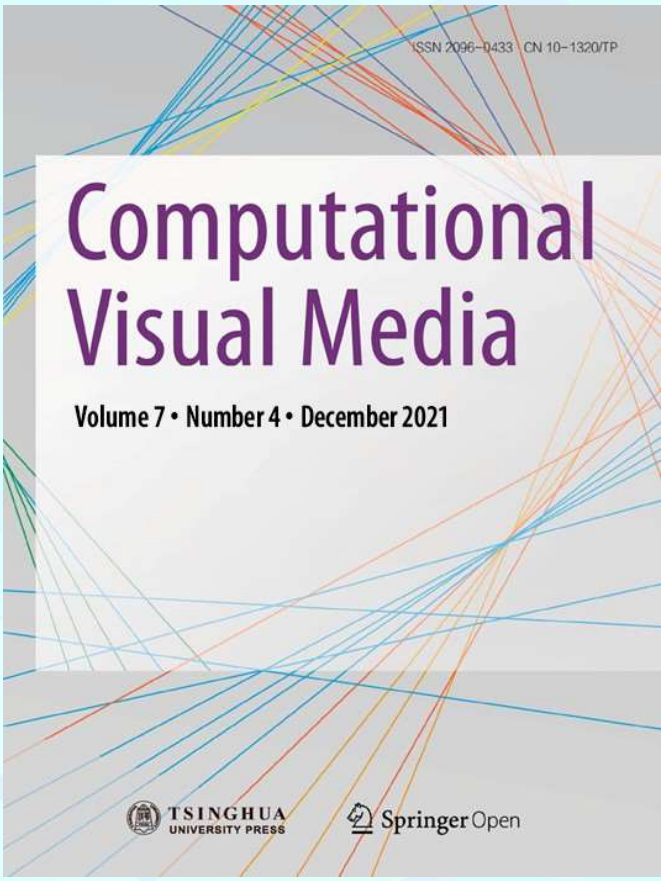
GMP2022

- Date: May 11-13, 2022
- Venue: OIST, Okinawa, Japan
- Website: https://groups.oist.jp/mmmu/gmp2022

PG 2022

- Date: October 5-8, 2022
- Venue: Kyoto International Conference Center, Kyoto, Japan
- Website: https://pg2022.org

Journal of Computational Visual Media (CVMJ) @ 2021



Computational Visual Media (CVMJ) is a single-blinded peer-reviewed open access journal published quarterly by Tsinghua University Press and Springer. It publishes original high-quality research papers and significant review articles on novel ideas, methods, and systems relevant to visual media. CVMJ was founded by the Visual Media Research Center of Tsinghua University in 2015. Professor Shi-Min Hu from Tsinghua University is the Editor-in-Chief, and Professor Ming C. Lin from University of Maryland and Professor Ralph R. Martin from Cardiff University are the Associate Editors-in-Chiefs.

Exciting news for CVMJ in 2021 was its inclusion in the Web of Science. Papers from January 2019 will be included in the database. Despite its short history, CVMJ has been included in several indexing and database services, including SCIE, DBLP, EI Compendex, INSPEC and SCOPUS.

CVMJ expects to receive its first official impact factor in mid-2022 and owns an immediate (till Dec. 11, 2021) impact factor of **3.33**. We look forward to receiving further excellent papers in 2022!

https://www.editorialmanager.com/cvmj/default1.aspx

Overview of CVMJ Publication in 2021

A total of 35 papers were published in the 4 issues in 2021, including 5 Review articles, 28 Research articles and 2 Short communications, which are regularly submitted or recommended by the CVM conference (one of the three international conference hosted by AG).

The authors of all the papers come from China, Japan, South Korea, the United Arab Emirates, UK, USA, Canada, Israel, Austria, the Czech Republic and Hong Kong (China). Among them, 34.29% of the published papers are from oversea of China.

The authors of the papers include many well-known scholars in the field of graphics, just to name a few: Daniel Cohen-Or, Craig Gotsman, Ming C. Lin, Ralph R. Martin, Nelson Max, Niloy Mitra, Ariel Shamir, Tien-Tsin Wong, etc.

The 5 Review articles introduce advances and challenges for visual analytics techniques in machine learning, salient object detection in RGB-D, machine learning for digital try-on, deep learning-based Monte Carlo denoising and inversion-free geometric mapping construction.

The 2 short communications, one introducing Jittor-GAN, a fast-training generative adversarial network model zoo based on Jittor, and the other discussing the hot debate on whether the attention mechanism could enable MLPs to catch up with CNNs.

The remaining 28 research articles spare a wide range over 3D reconstruction, point cloud learning, SLAM, light-field rendering, anti-aliasing in rendering reflections, image denoising and smoothing, image resizing, image segmentation, salient object detection in RGB-D, human-object interaction detection, etc.

Spotlight papers

As in 2020, CVMJ selected several outstanding papers as spotlight papers which were publicized in social media. These 6 papers were selected in 2021:

CVMJ 2021 Spotlight papers (1)

- Jun Yuan, Changjian Chen, Weikai Yang, Mengchen Liu, Jiazhi Xia & Shixia Liu, A survey of visual analytics techniques for machine learning, Computational Visual Media, 2021, Vol.7, No. 1, 3-36.

- ***A survey of visual analytics techniques for machine learning***

This paper was accomplished by Prof. Shixia Liu and her students from School of Software, Tsinghua University, Researcher Mengchen Liu from Microsoft Research Redmond, and Prof. Jiazhi Xia from Central South University. This survey systematically reviews visual analytics techniques for machine learning with a new taxonomy, which includes three first-level categories: techniques before model building, techniques during modeling building, and techniques after model building. They also discuss and highlight research challenges and promising potential future research opportunities useful for visual analytics researchers.

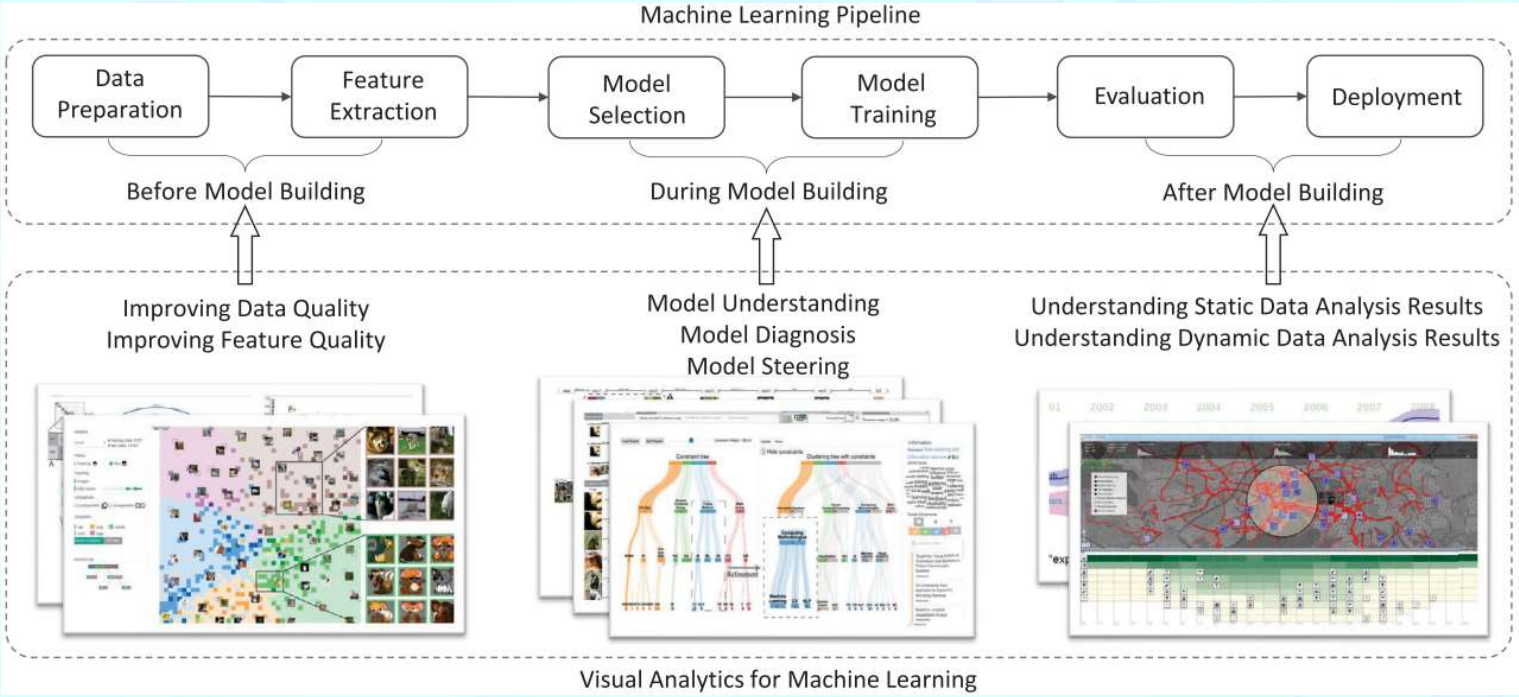


Fig. 1 An overview of visual analytics research for machine learning.

CVMJ 2021 Spotlight papers (2)

- Tao Zhou, Deng-Ping Fan, Ming-Ming Cheng, Jianbing Shen, Ling Shao, RGB-D salient object detection: A survey. Computational Visual Media, 2021, Vol.7, No. 1, 37-69.

- ***RGB-D salient object detection: a survey***

This paper was published by Dr. Tao Zhou, Dr. Deng-Ping Fan, Prof. Jianbing Shen and Prof. Ling Shao from the Inception Institute of Artificial Intelligence (IIAI), UAE, in collaboration with Prof. Ming-Ming Cheng from Nankai University. This paper provides a comprehensive survey of RGB-D based salient object detection models from various perspectives, reviews related benchmark datasets in detail, and finally discusses several challenges and open directions of RGB-D based salient object detection for future research.

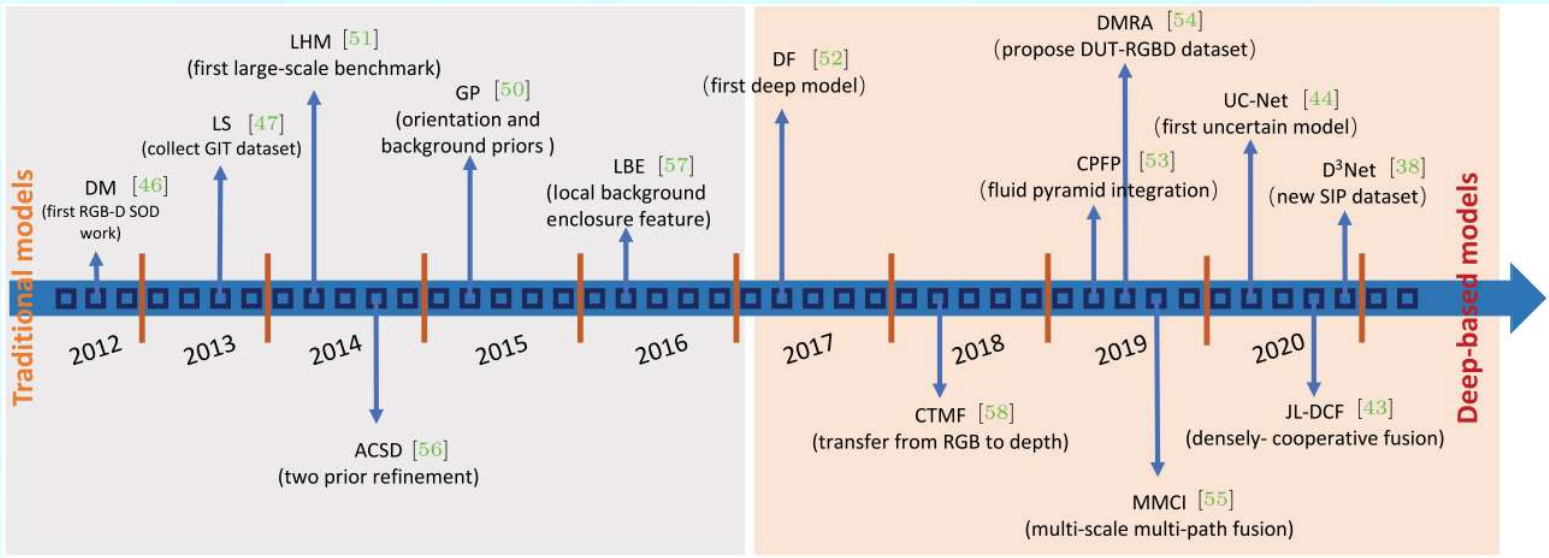


Fig. 2 A brief chronology of RGB-D based salient object detection.

CVMJ 2021 Spotlight papers (3)

- Yuchi Huo, Sung-eui Yoon, A survey on deep learning-based Monte Carlo denoising, Computational Visual Media, 2021, Vol. 7, No. 2, 169-185.

- ***A survey on deep learning-based Monte Carlo denoising***

This article was co-authored by Dr. Yuchi Huo and Prof. Sung-eui Yoon from KAIST. It summarizes and compares state-of-the-art techniques in deep learning-based MC denoising categorized in three aspects, i.e. pixel denoising, nontrivial-domain denoising and high-dimensional denoising, and points out open problems for future directions.

Fig. 3 Deep learning-based Monte Carlo denoising.

https://www.editorialmanager.com/cvmj/default1.aspx

CVMJ 2021 Spotlight papers (4)

- Meng-Hao Guo, Jun-Xiong Cai, Zheng-Ning Liu, Tai-Jiang Mu, Ralph R. Martin & Shi-Min Hu, PCT: Point cloud transformer, Computational Visual Media, 2021, Vol. 7, No. 2, 187-199.

- ***PCT: Point cloud transformer***

This article was published by Prof. Shi-Min Hu and his students: Meng-Hao Guo, Jun-Xiong Cai etc. from Tsinghua University, in collaboration with Prof. Ralph R. Martin from Cardiff University. It adapts Transformer, a well-known network in natural language processing, for general point cloud processing, by designing novel input embedding and attention mechanisms, achieving the state-of-the-art performance on shape classification, part segmentation, semantic segmentation, and normal estimation tasks. This article has been cited 90+ times in Google Scholar since published online in April.

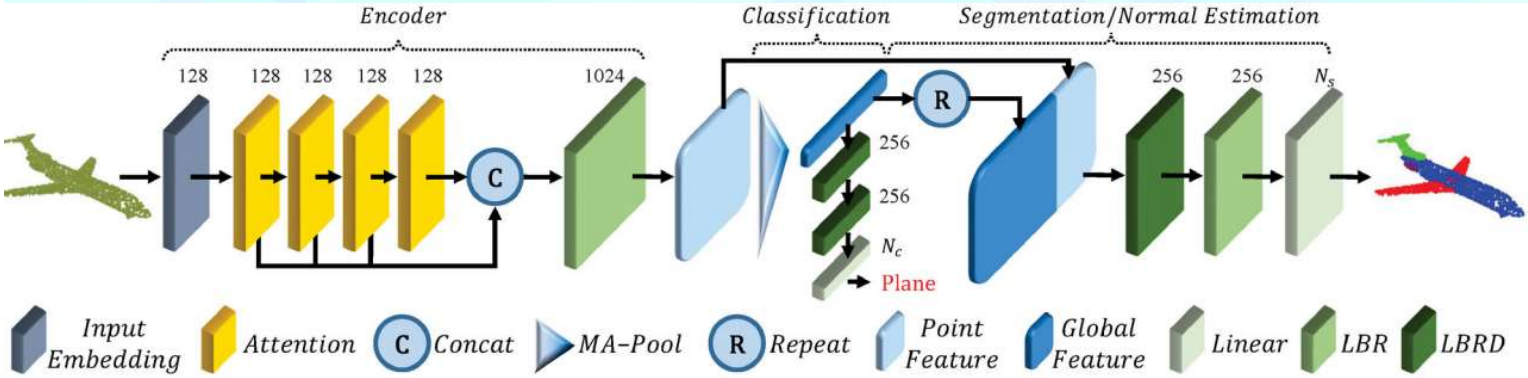


Fig. 4 The architecture of PCT.

CVMJ 2021 Spotlight papers (5)

- Xiao-Ming Fu, Jian-Ping Su, Zheng-Yu Zhao, Qing Fang, Chunyang Ye & Ligang Liu, Inversion-free geometric mapping construction: A survey, Computational Visual Media, 2021, Vol. 7, No. 3, 289-318.

- ***Inversion-free geometric mapping construction: a survey***

This article was co-authored by Prof. Ligang Liu, Associate Prof. Xiao-Ming Fu and their students from the School of Mathematical Sciences, University of Science and Technology of China. This survey provides a systematic overview for the basic problem in geometric processing--inversion-free mapping construction, with a detailed discussion of the construction methods, including their strengths and weaknesses, and a description of open problems in this research field.

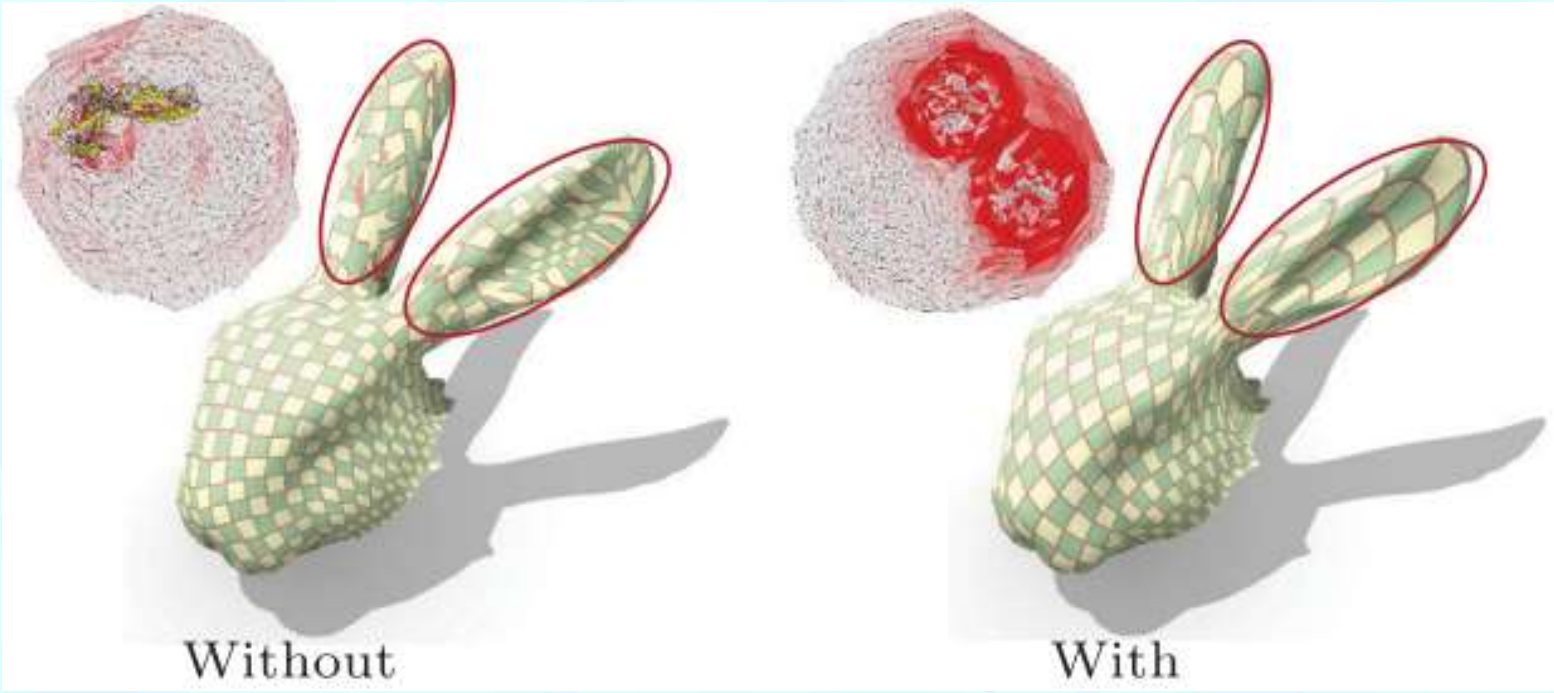


Fig. 5 Parameterizations with/without inversion-free constraints.

CVMJ 2021 Spotlight papers (6)

- Dov Danon, Moab Arar, Daniel Cohen-Or and Ariel Shamir, image resizing by reconstruction from deep features, Computational Visual Media, 2021, Vol. 7, No.4, 453-466.

- ***Image resizing by reconstruction from deep features***

This research paper was co-authored by Prof. Daniel Cohen-or from Tel Aviv University, his students, and Prof. Ariel Shamir from The Interdisciplinary Center Herzliya. Different from the traditional methods directly resizing image in the pixel space, this paper performs image resizing in feature space using the deep layers of a neural network containing rich important semantic information, and reconstructs the resized image using neural-network based optimization, achieving better results on challenging images.

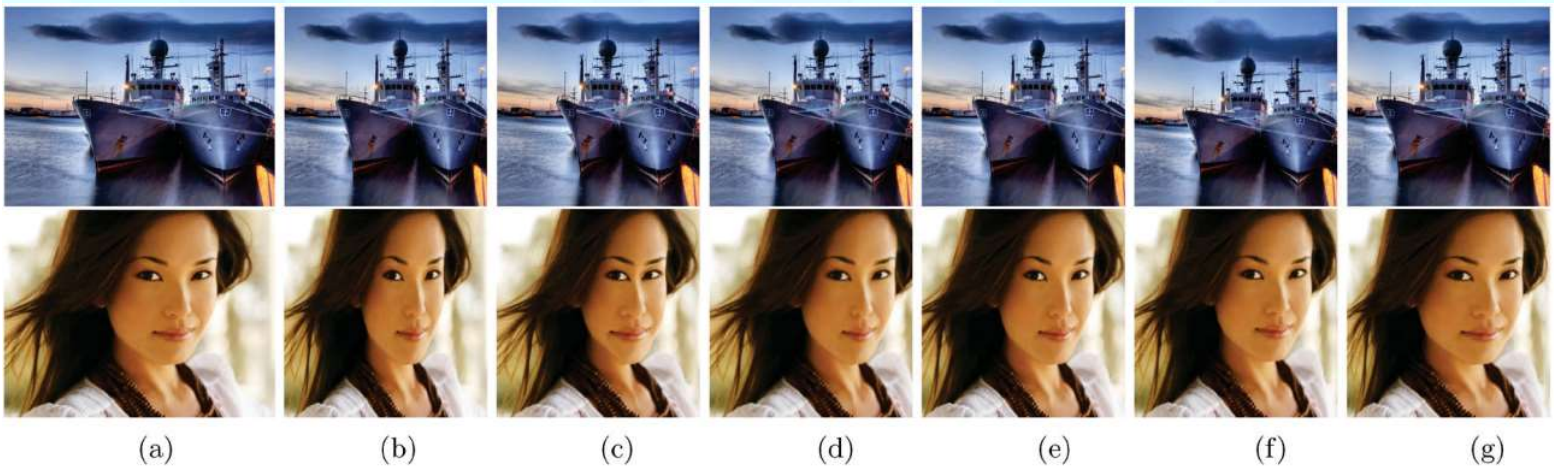


Fig. 6 Comparison. (a) Input, (b) - (f) alternatives, (g) proposed.

AG Webinar

new@2021

Mission: The AG webinar (held monthly) aims to showcase exciting research results, inspire and motivate new research, and create a regular recurring opportunity for the Asiagraphics community to meet and exchange ideas.

Format: In each AG webinar we will have 1.5 hours live session with 1-2 talks followed by Q&A, which will be held on Tuesday evening (Asian time) near the end of each month. Audiences can watch the live talks and raise questions on Youtube or Huya during and right after the talks. Then the session chair will help paraphrase the questions to the speakers.

Playback videos: All AG webinar talks will be recorded and shared on both Youtube and Bilibili.

Working Team:

- Ligang Liu (team chair)
- Xiao-Ming Fu (secretory)
- Yuki Koyama
- Minhyuk Sung

Nomination: if you want to nominate a speaker or provide feedback, please feel free to contact us or via asiagraphics.ag@gmail.com.

Previous AG Webinars (1)

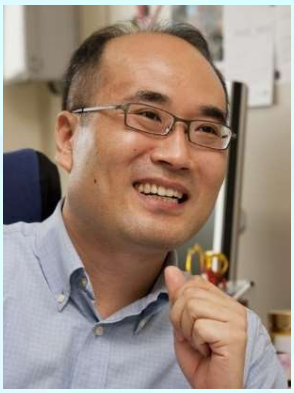
- **Session 1:** Monday, August 30, 2021
  - Speakers: Wenping Wang, Nobuyuki Umetani
  - Chair: Ligang Liu


- **Session 2:** Tuesday, September 28, 2021
  - Speakers: Daniel Cohen-Or, Lin Gao
  - Chair: Hongbo Fu


- **Session 3:** Tuesday, October 26, 2021
  - Speakers: Takeo Igarashi, Ruizhen Hu
  - Chair: Nobuyuki Umetani


Previous AG Webinars (2)

- **Session 4:** Tuesday, November 30, 2021
  - Speakers: Seungyong Lee, Jinshan Pan
  - Chair: Jue Wang




- **Session 5:** Wednesday, December 22, 2021
  - Speakers: Chi-Wing Fu, Xianzhi Li, Ruihui Li
  - Chair: Peng Song



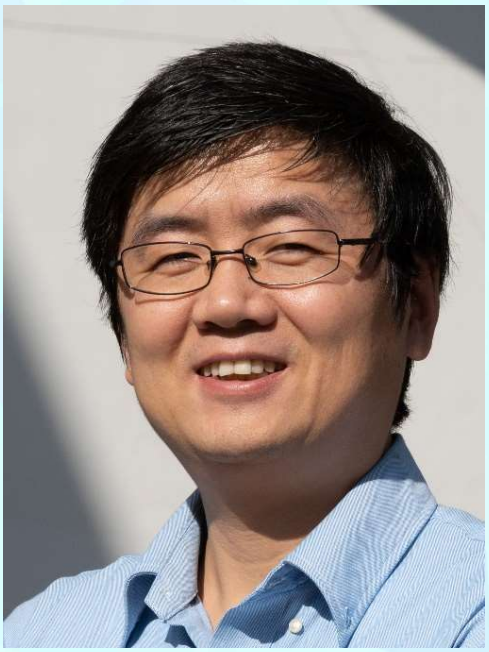
AG Webinar Session 6

Advertisement

Date: Tuesday, January 18, 2022
Time: 11:00am UTC/GMT | 07:00pm (Beijing, Singapore) | 08:00pm (Seoul, Tokyo)
Chair: Ying He, Nanyang Technological University, Singapore

Talk 1

Title: Data-driven Sketch Interpretation
Speaker: Prof. Hongbo Fu,
City University of Hong Kong, China



Abstract:
Freehand sketching provides an easy tool for communication between people. While human viewers can easily interpret the semantics of a freehand sketch, it is often difficult to teach machines to understand sketches like we do, mainly because of different levels of abstraction, drawing styles, and various sources of drawing errors. In this talk, I will introduce how data-driven approaches can help us address various sketch understanding tasks, including sketch classification, sketch segmentation and labeling, 3D interpretation of freehand sketches, and sketch-based image generation.

AG Webinar Session 6

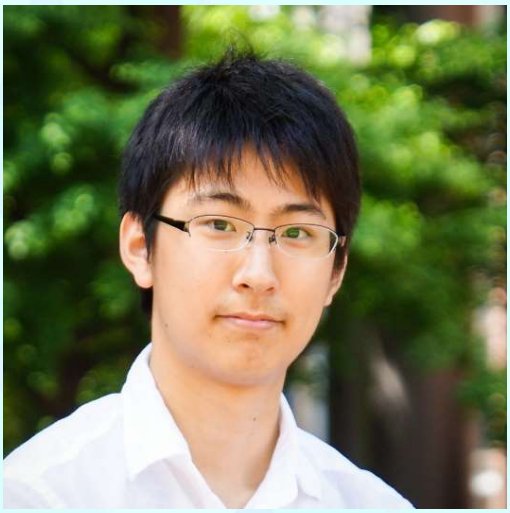
Advertisement

Talk 2

Title: Human-in-the-Loop Preferential Bayesian Optimization for Visual Design

Speaker: Dr. Yuki Koyama, National Institute of Advanced Industrial Science and Technology (AIST), Japan

Abstract:



Visual design often involves searching for an optimal parameter set that produces a subjectively preferable design. However, this optimization problem is not trivial to solve with typical optimization algorithms since the objective function is human preference and thus requires special treatment. In this talk, I will introduce preferential Bayesian optimization (PBO), a powerful technique to aid this task. PBO is a human-in-the-loop Bayesian optimization specializing in relative preference oracle (i.e., which option is liked the most). This method models the latent preference in a probabilistic manner and generates effective preference queries to human evaluators based on the preference model. Then, I will explain two of my recent works [SIGGRAPH 2017; SIGGRAPH 2020], which are built on PBO and achieve even better sample efficiency by combining with tailored user interactions.

AG Newsletters

new@2021

Goal: The goal of AG Newsletters is to provide latest news on computer graphics and relevant fields (such as VR/AR, 3D vision, fabrication, HCI, visualization, metaverse, etc.) to and help distribute and advertise useful information for all AG members.

Format: We will make and release one issue of AG Newsletters per 1 or 2 months, depending on the contents during the year. Each issue will be sent to all AG members via email at the end of the months.

Issues: Currently we have published 3 issues, i.e., one issue per month during the last three months.

Issue 1
Oct. 31, 2021

Issue 2
Nov. 30, 2021

Issue 3
Dec. 31, 2021

http://www.asiagraphics.org/newsletter/

AG Newsletters

Call for contents: For any AG member who wants to share information or make advertisement in future issues of AG newsletters, please send the relevant item documents to us via the AG official email: asiagraphics.ag@gmail.com.

The items can be, but not limited to, as follows:

- reports on recent graphics related events (such as conferences, workshops, seminars, competition, etc.)
- breaking works/products/news;
- call for papers (CFP) of conferences, workshops, or special issues of journals, etc.
- advertisements and/or broadcasting news for future events, such as workshops, conferences, seminars, industrial news, etc.
- recruitment of faculty, staff, postdocs, or RA of universities, research labs, etc.
- other relevant stuff.

AG Membership

AG Members

In order to fulfil its purpose, AG shall act either directly or through its members or through groupings created by its members either on a subject or national basis.

Please see the details in the constitution of AG at: http://www.asiagraphics.org/constitution/

Membership Fee

The AG membership fee is currently 0$. The membership fee for 2022 and later years will be announced later.

How to join

Please follow the easy steps below to complete your membership registration:

1. Follow the following link, which can also be found at the AG website, to go to the application page: https://asiagraphics.wufoo.com/forms/asia-graphics-membership-registration/
2. Fill in the required information specified on the page:
   a. Name and Gender
   b. Occupation: student, teacher, engineer, designer, etc
   c. Email address and other (optional) contact information
   d. Affiliation

AG Membership

Rights and Interests

We appeal to your support by joining the AG Association as members.

The following information is for your ease of reference.

1. AG membership is open to all people interested in computer graphics, interactive technology, and related fields;
2. Members enjoy discounts in registration fees for the conferences (including PG, GMP, CVM) organized or sponsored by AG;
3. The membership fee is waived in 2022. The annual fee in the future will be determined by the Executive Committee of AG;
4. All members have the same voting right, including electing executives and being elected to be executives;
5. There is no separate category of student membership. Student members have the same voting right as the other members;
6. The numbers of executives from different regions or countries are roughly proportional to the number of members from the regions or countries;
7. All AG members will be invited to nominate and elect the Executive Committee members of AG in online elections.

Prof. Ming C. Lin won the CCF Award for Overseas Outstanding Contribution

- The China Computer Federation (CCF) Award Ceremony was held simultaneously at Shenzhen International Convention and Exhibition Center and Beijing Branch venue (Institute of computing, Chinese Academy of Sciences) and online on December 17, 2021.
- CCF Awarding Committee decided to honor Professor Ming C. Lin, Department of Computer Science, University of Maryland, who is an EC member of AG, with 2021 CCF Award for Overseas Outstanding Contribution, to recognize her great achievements in computing and contribution to China computing development.
- **About the Award:** Established in 2005, CCF Award for Overseas Outstanding Contribution is presented to individuals or organization who have made outstanding contributions to promote China computing industry and development in scientific research, academic communications, talent cultivation and international cooperation.

Professor Ming C. Lin
University of Maryland
EC member of AG

Professor Ming C. Lin is an internationally renowned scholar in computer graphics, robotics, and virtual reality. She has made outstanding contributions to interaction and simulation of large-scale physical phenomena, crowd and traffic simulation, sound rendering and more. She helps promoting the research and talent training in computer graphics within China and worldwide, and has actively participated in CCF activities.

Congratulations to Prof. Ming C. Lin!

https://www.ccf.org.cn/en/News/2021-10-25/748765.shtml

Multiple Faculty Positions in Computational Media and Arts for HKUST @ Guangzhou

- The Hong Kong University of Science and Technology (HKUST) invites applications for multiple faculty positions at all ranks in ***Computational Media and Arts (CMA)*** for its new campus in Guangzhou (GZ). Currently offering M.Phil and Ph.D degrees, the CMA promotes the interplay of media arts, technology, and research and exploits the most advanced technologies for creativity with a social impact.
- **Positions:** We welcome candidates from a wide range of backgrounds related to computational media and arts, and those whose research fall within the following areas are especially encouraged to apply: AR/VR/MR, games and interactive media, data visualisation, and HCI.
- **Why join us?**
  - Generous salary & low tax rate
  - On-campus luxury flat
  - Sizeable startup grant provided
  - Ranked 34th in the world, 8th in Asia
  - 2,000 sqm CMA creative facilities
  - English-speaking university

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY (GUANGZHOU)

Computational Media and Arts

Application Procedure

Applications should be submitted through the recruitment system:
https://gz-faculty-recruitment.hkust.edu.hk/

Please send inquiries to cmat@ust.hk. Visit https://cma.hkust-gz.edu.cn/ or scan the QR code for more information about the Computational Media and Arts team and program.

https://cma.hkust-gz.edu.cn/recruitment

Call for Papers

PG 2022

Pacific Graphics2022
http://pg2022.org
(Open from Dec.1st, 2021)

Contact us: info@pg2022.org

The 30th annual international conference on computer graphics and applications, Pacific Graphics 2022, will take place at Kyoto International Conference Center, Kyoto, Japan on October 5th-8th, 2022.

Pacific Graphics is a flagship conference of the AsiaGraphics Association.

All accepted journal track papers will be published in a special issue of Computer Graphics Forum (CGF), the journal of the Eurographics Association, in print and online in 2022.

Important Dates (Exact date will be announced later.)
Journal Track Paper Submission: June, 2022
Short Paper and Poster Submission: August, 2022

>Conference Leadership

>>Conference Chairs

Shigeo Morishima, Waseda University
Demetri Terzopoulos, UCLA
Hubert Shum, Durham University

>>Program Chairs

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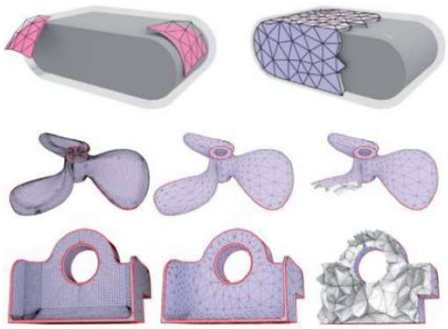
KYOTO TRADITION MEETS INNOVATION

Supporters

ASIAGRAPHICS Asian Association for Computer Graphics and Interactive Technology

Eurographics European Association for Computer Graphics

WASEDA University 早稲田大学



Call for Papers

2022 Symposium on Solid and Physical Modeling (SPM-2022)

June 27-29, 2022 – Singapore (A Virtual Event)

The Symposium on Solid and Physical Modeling (SPM) is an international conference series organised annually with the support of the Solid Modeling Association (SMA). The conference aims at all aspects of geometric and physical modeling, and their application in design, analysis and manufacturing, as well as in biomedical, geophysical, digital entertainment, and other areas. The conference serves also as a ceremony for awarding the 2022 Pierre Bézier Prize for contributions to solid, shape, and physical modeling. Due to global pandemic, SPM 2022 will be held as an online event. Topics of interest include, but are not limited to:

- ✦3D fabrication/printing/manufacturing technologies
- ✦Anisotropic/heterogeneous/composite materials
- ✦Applied algebraic and differential geometry
- ✦Applied computational geometry and topology
- ✦Blend, sweep, offset, Minkowski, and other operations
- ✦Computational fabrication
- ✦Constraint modeling & satisfaction
- ✦Curve, surface, and manifold modeling
- ✦Data fitting and approximation
- ✦Design, analysis, simulation, automation and optimization
- ✦Dimensioning & tolerancing
- ✦Feature modeling, recognition, and understanding
- ✦Function and assembly modeling
- ✦Geometry compression
- ✦Geometric and topological representations
- ✦Geometric modeling and processing
- ✦Isogeometric and finite element analysis
- ✦Meshing and mesh optimization
- ✦Manufacturing and assembly planning
- ✦Mesh processing
- ✦Model validation and repair
- ✦Multi-resolution techniques
- ✦Numerical analysis of geometric algorithms
- ✦Parametric and feature-based models and representations
- ✦Physically-based concepts for shape modeling
- ✦Reverse engineering, model reconstruction from samples
- ✦Robustness and validity of geometric computations
- ✦Shape modeling, synthesis, and analysis

Paper Submissions: Accepted full-length papers will be published in the journal of Computer-Aided Design (Elsevier) after a rigorous two-stage double-blind review process. Papers should be formatted according to the style guidelines for Computer-Aided Design and should not exceed 12 pages, including figures and references. We strongly recommend using the LaTeX template to format your paper, but we also accept papers formatted by MS Word according to the style guidelines for Computer-Aided Design (Elsevier). The file must be submitted in PDF format using the EasyChair website https://easychair.org/conferences/?conf=spm20220.

Important Dates:

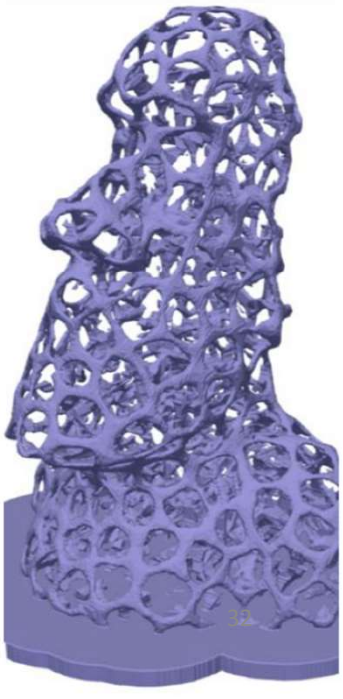
February 4, 2022	Abstracts for full papers
February 10, 2022	Full paper submission
March 25, 2022	First review notification
April 15, 2022	Revised papers due
April 29, 2022	Final notification
May 16, 2022	Camera-ready papers
June 27-29, 2022	Conference (SPM-2022)

Conference Homepage: https://spm2022.sciencesconf.org/

Contact: spm2022@sciencesconf.org

Conference Chairs
Konrad Polthier, Freie Universität Berlin, Germany
Myung-Soo Kim, Seoul National University, Korea
Ying He, Nanyang Technological University, Singapore

Program Chairs
Georges-Pierre Bonneau, University of Grenoble, France
Morad Behandish, Palo Alto Research Center, USA
Jianmin Zheng, Nanyang Technological University, Singapore



All figures are selected from SPM-2021

Call for Papers: SIGGRAPH 2022

The SIGGRAPH 2022 Technical Papers program is the premier international venue for disseminating and discussing new scholarly work in computer graphics technology and interactive techniques. The scientific excellence of the ideas is the predominant acceptance criterion. We are looking for high-quality research papers.

Paper Submissions: At SIGGRAPH 2022, there are two ways to submit your paper to the Technical Papers program.

✓ JOURNAL PAPERS:
- Continuation of the same Technical Papers program from previous years
- Ideas are extensively tried and tested
- No maximum (or minimum) page length
- Published in ACM Transactions on Graphics (TOG)

✓ CONFERENCE PAPERS:
- New program starting in 2022
- Exciting new ideas in a shorter format – papers that might be less polished but still have an impact
- Strict, 7-page limit, plus additional pages for references
- Published in SIGGRAPH Conference Proceedings

The review process, deadline and committee are the same for both Journal and Conference Papers. Also, starting in 2022, for the first time we will be giving out Best Technical Papers Awards.

SUBMISSIONS DEADLINE:
- **Submissions Form & Conflicts:** Wed, 26 January 2022, 22:00 +00:00 GMT
- **Paper Deadline:** Thu, 27 January 2022, 22:00 +00:00 GMT
- **Upload Deadline:** Fri, 28 January 2022, 22:00 +00:00 GMT

https://s2022.siggraph.org/program/technical-papers/

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