

Computational Origami

How to Fold (Almost) Anything

Erik D. Demaine + Tomohiro Tachi

2013 年 9 月 15 日(日) 15:00~ @学際交流ホール

Dates: 2013 September 15th (Sun) 15:00-16:00 (14:30 Open)
16:00~ Gallery tour at Komaba Museum "Form of Computational Origami" 『計算折紙のかたち』

Venue: Gakusai-Koryu Auditorium, 3F Administration Bldg., Komaba I Campus, The University of Tokyo
東京大学教養学部 学際交流ホール (駒場Iキャンパス アドミニストレーション棟 3F)

Origami, the art of folding a sheet of paper into various forms without stretching or cutting, is now developing as an interdisciplinary research area involving art, mathematics, computer science, engineering, etc. **Computational origami**, i.e., the geometry and algorithm of origami, plays an important role in bridging these fields.

In this lecture, we present the theoretical and practical aspects of computational origami through our recent studies of 3D origami design (e.g., developable surface with curved crease, origamizer, maze-folding, and origami-based personal fabrication) and kinematic origami design (e.g., rigid-foldability, rigid origami simulation, and self-folding origami robot).

Erik D. Demaine is a Professor in Computer Science at the Massachusetts Institute of Technology. His research interests range throughout algorithms, from data structures for improving web searches to the geometry of understanding how proteins fold to the computational difficulty of playing games. He received a MacArthur Fellowship as a "computational geometer tackling and solving difficult problems related to folding and bending—moving readily between the theoretical and the playful, with a keen eye to revealing the former in the latter".

Tomohiro Tachi is an assistant professor at the University of Tokyo, Department of Interdisciplinary Sciences. He received his doctoral degree in engineering from the University of Tokyo, Japan. His research interests include origami, deployable structures, computational design, and digital fabrication

主催：東京大学大学院総合文化研究科・教養学部 自然科学博物館

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