

Preface

Fabrication and Sculpting Event 2021

There are at least two aspects to shape modeling: theoretical and practical. The mathematical and theoretical aspects of shape modeling have traditionally been supported by the SMI conference. With the Fabrication and Sculpting Event (FASE) our goal is to include more hands-on, application-oriented ways by designers and sculptors who construct sophisticated real-world objects.

FASE has its own program committee, and the accepted papers are published in Hyperseeing. With FASE, we hope to attract practitioners who might usually be less inclined to write papers containing formal algorithms or mathematical proofs, but who nevertheless have important things to say that are of interest to the shape modeling community and who also might provide visually stimulating material.

For this year's Fabrication and Sculpting Event, we solicited papers that pose new questions and motivate further research in designing, fabrication and sculpting. Topics should be useful, for example, in the following areas: Fabrication of digital models, Advanced manufacturing techniques such as additive manufacturing, laser cutting or CNC milling, Interactive or procedural design of manufacturable shapes, Interconnections of complex modeling and fabrication processes, visually stimulating fabrication techniques or printed structures.

Thus, the scope of FASE is the intersection of shape modeling and fabrication methods/algorithms, and papers may focus on both the digital/theoretical and the physical domain or just one of these domains – as long as the connection to the other domain is clear. It is not a requirement that the techniques presented in the paper involve computation as such, but they need to have a clear algorithmic or mathematical element.

We received seven submissions this year and three of them were accepted as twelve-page or longer full papers, and another two were accepted as short papers eight pages or shorter. The five accepted papers span a wide range of topics and views on the fabrication process of various artistically interesting artifacts. We wish to thank the authors and the reviewers for their participation in the SMI/ISAMA 2021 Fabrication and Sculpting Event. We hope that new ideas and partnerships will emerge from the FASE papers that can offer a glimpse into a much larger territory and the event can enrich interdisciplinary research in Shape Modeling. We hope that the attendees of SMI 2021 will enjoy this event of the conference.



Oleg Fryazinov, and Carlo Séquin

FASE Papers chairs