Shohei Katakura **curriculum vitae**

Hasso Plattner Institute PhD Candidate
Prof.-Dr.-Helmert.-Str. 2-3, 14482, Potsdam, Germany
shohei.katakura@hpi.de
https://katakurashohei.me/

Education

Hasso Plattner Institute, Germany 2019-2027
Ph.D. in Computer Science / Human Computer Interaction (expected)
Advisor: Patrick Baudisch

Meiji University, Japan 2013-2019
MEn.and BSc. in Information Science
Advisor: Keita Watanabe

Full papers at CHI/UIST top-tier HCI conferences with a 20-25% acceptance rate

[8] Lukas Rambold, Robert Kovacs, Min Deng, Antonius Nauman, Konrad Gerlach, Horatio Montero Hamkins, Helena Lendowski, Chiao Fang, **Shohei Katakura**, Conrad Lempert, Muhammad Abdullah, and Patrick Baudisch. AirForce: Personal Fabrication of Large-Scale, Load-Bearing Animatronics Structures from a Single Tube. **CHI26**

[7] **Shohei Katakura**, Chiao Fang, Mehdi Gouasmi, Lino Hellige, Yoan Tchorenev, David Bizer, Conrad Lempert, Martin Taraz, Abdullah Muhammad, and Patrick Baudisch. Enabling the Assembly of Load-Bearing Laser-Cut Models. **UIST25**

[6] **Shohei Katakura,** Martin Taraz, Abdullah Muhammad, Paul Methfessel, Lukas Rambold, Robert Kovacs, and Patrick Baudisch. Kerfmeter: Automatic Kerf Calibration for Laser Cutting. **CHI23**

[5] Abdullah Muhammad, Romeo Sommerfeld, Bjarne Sievers, Leonard Geier, Jonas Noack, Marcus Ding, Christoph Thieme, Laurenz Seidel, Lukas Fritzsche, Erik Langenhan, Oliver Adameck, Moritz Dzingel, Thomas Kern, Martin Taraz, Conrad Lempert, **Shohei Katakura**, Hany Mohsen Elhassany, Thijs Roumen, and Patrick Baudisch. HingeCore: Laser-Cut Foamcore for Fast Assembly. **UIST22**

[4] Keunwoo Park, Conrad Lempert, Abdullah Muhammad, **Shohei Katakura**, Jotaro Shigeyama, Thijs Roumen, and Patrick Baudisch. FoolProofJoint: Reducing Assembly Errors of Laser-Cut 3D Models by Means of Custom Joint Patterns. **CHI22**

[3] Robert Kovacs, Lukas Rambold, Lukas Fritzsche, Dominik Meier, Jotaro Shigeyama, **Shohei Katakura**, Ran Zhang, and Patrick Baudisch. Trusscillator: a System for Fabricating Human-Scale Human-Powered Oscillating Devices. **UIST21**

[2] Abdullah Muhammad, Martin Taraz, Yannis Kommana, **Shohei Katakura,** Robert Kovacs, Jotaro Shigeyama, Thijs Roumen, and Patrick Baudisch. FastForce: Real-Time Reinforcement of Laser-Cut Structures. **CHI21**

[1] **Shohei Katakura**, Yuto Kuroki, and Keita Watanabe. A 3D Printer Head as a Robotic Manipulator. **UIST19**

A note on publication venues: in my primary area of research, Human Computer Interaction, the ACM Conference on Human Factors in Computing Systems (CHI) is considered one of the best forums for dissemination of research results and covers the broad spectrum of research in Human Computer Interaction. The ACM Symposium on User Interface Software and Technology (UIST) is of similar quality, but is focused on a particular sub-area of the field, namely interactive techniques and devices. Papers in these conferences are refereed as full papers, and have an acceptance rate of around 15-25% each year.

Employment

University of Tokyo (Takeo Igarashi UI Lab), Japan 2018-2019
Research Assistant

Mito Creator, Japan 2018-2019
Project Leader

Teaching

Lecturing

[6] Finite Element Analysis (60 min)	2025
[5] Forward and Inverse Kinematics (180 min)	2024
[4] Introduction to Unity (120 min)	2021-26
[3] Introduction to develop an application for a haptics device (120 min)	2021-26
[2] Introduction to Speech I/O in Unity (90 min)	2021-26
[1] Design for manufacturing and assembly (120 min)	2020-22

Teaching Assistant at Hasso Plattner Institute, Germany

[7] Robotics and Computer Vision (20 students), co-lectured	2025
[6] Building Interactive Systems (40 students), co-lectured	2025
[5] Building Interactive Systems (60 students), co-lectured	2024
[4] Building Interactive Systems (30 students), co-lectured	2023
[3] Building Interactive Systems (30 students), co-lectured	2022
[2] Building Interactive Systems (30 students), co-lectured	2021
[1] Building Interactive Systems (30 students)	2020

Mentoring

Junior TA

[5] Mehdi Gouasmi	2023/24
[4] Chiao Fang	2023/24
[3] Oleksandr Martemianov	2022
[2] Laurenz Seidel	2021
[1] Benjamin Daniel	2020/21

Research Project Students (1 day per week for a semester)

[9] Robert Wiegand	2025	[4] Mehdi Gousami	2022
[8] Tilman Ripke	2025	[3] Wanda Baltzer	2021
[7] Nick Roeseler	2024/25	[2] Alejandro Costa	2020
[6] Lino Hellige	2023	[1] Tim Hehman	2020
[5] Bennet Kampe	2022/25		

Programming project for first-semester students (1 day per week for a semester)

[19] Serhat Aslan	2024	[9] Felix Treykorn	2021

[18] Jan-Erik Großmann	2024	[8] Jenny Sommerfeld	2021
[17] Keren Pietzsch	2024	[7] Laura Beermann	2021
[16] Salina Alaro	2024	[6] Konrad Letz	2021
[15] Annalena Schnabel	2024	[5] Nicola Kössler	2021
[14] Gabriel Klusmeyer	2024	[4] Linus Löll	2021
[13] Henriette Blumreiter	2024	[3] Oliver Zimmermann	2021
[12] Lilly Freytag	2024	[2] Simon Schöttner	2021
[11] Mara Domschke	2024	[1] Joshua Riewesell	2021
[10] Gustav Freitag	2024		

Awards and Honors

[2] **Research school scholarship**, Hasso Plattner Institute 2019-2023
[1] **Mitou Super Creator**, Mitou-Foundation 2018

Funding

[1] **Mitou 2018**, PM Masahiko Inami (~15000 euro per year) 2018-2019

Academic Activities

Reviewer: CHI (2020/23/24/25), UIST (2021), SFC (2023), TEI (2024), DIS(2022)

Skills

Programming: C#, Common Lisp, Scheme (Racket), Python, C/C++, TypeScript, Processing.
Design: Rhinoceros 3D/Grasshopper, Blender, Illustrator, Pixelmator.
Language: Japanese (native), English (fluent)