

# Thijs Roumen - CV

Hasso Plattner Institute PhD candidate  
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## Education

*Hasso Plattner Institute, Germany* **2014-now**  
Ph.D. in Human Computer Interaction  
Advisor: Patrick Baudisch

*University of Southern Denmark, Denmark* **2011-2013**  
MSc. in IT Product Design  
Thesis advisor: Stephan Wensveen

*Eindhoven University of Technology, Netherlands* **2007-2011**  
BSc. in Industrial Design

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

[14] **Thijs Roumen**, Conrad Lempert, Ingo Apel, Erik Brendel, Markus Brand, Laurenz Seidel, Lukas Rambold, and Patrick Baudisch. AutoAssembler: Automatic Reconstruction of Laser-Cut 3D Models **UIST21**

[13] **Thijs Roumen**, Yannis Kommana, Ingo Apel, Conrad Lempert, Markus Brand, Erik Brendel, Laurenz Seidel, Lukas Rambold, Carl Goedecken, Pascal Crenzin, Ben Hurdelhey, Muhammad Abdullah, and Patrick Baudisch. Assembler<sup>3</sup>: 3D Reconstruction of Laser-Cut Models. **CHI21**

[12] **Thijs Roumen**, Ingo Apel, Jotaro Shigeyama, Abdullah Muhammad, and Patrick Baudisch. Kerf-Canceling Mechanisms: Making Laser-Cut Mechanisms Operate across Different Laser Cutters. **UIST20**

[11] **Thijs Roumen**, Jotaro Shigeyama, Julius Cosmo Romeo Rudolph, Felix Grzelka, and Patrick Baudisch. SpringFit: Joints and Mouns that Fabricate on Any Laser-Cutter. **UIST19**

[10] **Thijs Roumen**, Willie Mueller and Patrick Baudisch. grafter: remxing 3D printed Machines. **CHI18**

[9] **Thijs Roumen**, Bastian Kruck, Tobias Duerschmid, Tobias Nack, Patrick Baudisch. Mobile Fabrication. **UIST16**

[8] Patrick Baudisch, Arthur Silber, Yannis Kommana, Milan Gruner, Ludwig Wall, Kevin Reuss, Lukas Heilmann, Robert Kovacs, Daniel Rechlitz and **Thijs Roumen**. Kyub: A 3D Editor for Modeling Sturdy Laser-Cut Objects. **CHI19**

[7] Muhammad Abdullah, Romeo Sommerfeld, Laurenz Seidel, Jonas Noack, Ran Zhang, **Thijs Roumen** and Patrick Baudisch. Roadkill: Fast-to-Assemble Layouts for Laser-Cut Objects. **UIST21**

[6] Keunwoo Park, Conrad Lempert, Muhammad Abdullah, 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**

- [5] Muhammad Abdullah, Martin Taraz, Yannis Kommana, Shohei Katakura, Robert Kovacs, Jotaro Shigeyama, **Thijs Roumen**, and Patrick Baudisch. fastForce: Real-Time Reinforcement of Laser-Cut Structures. **CHI21**
- [4] Oliver Schneider, Jotaro Shigeyama, Robert Kovacs, **Thijs Roumen**, Sebastian Marwecki, Nico Boeckhoff, Daniel Amadeus Glockner, Jonas Bounama and Patrick Baudisch. DualPanto: A Haptic Device that Enables Blind Users to Continuously Interact with Virtual World. **UIST18**
- [3] Saiganesh Swaminathan, **Thijs Roumen**, Robert Kovacs, David Stangl, Stefanie Mueller, Patrick Baudisch. Linespace: A Sensemaking Platform for the Blind. **CHI16**
- [2] Lung-Pan Cheng, **Thijs Roumen**, Hannes Rantzsch, Sven Köhler, Patrick Schmidt, Robert Kovacs, Johannes Jasper, Jonas Kemper, Patrick Baudisch. TurkDeck: Physical Virtual Reality Based on People. **UIST15**
- [1] Jessalyn Alvina, Shengdong Zhao, **Thijs Roumen**, Simon T Perrault, Maryam Azh, Morten Fjeld. Omnivib: Towards cross-body spatiotemporal vibrotactile notifications for mobile phones. **CHI15**

## Research Internships

*National University of Singapore, Singapore*  
Advisor: Shengdong Zhao

**2014**

*Tsukuba University, Japan*  
Advisor: Seunghee Lee

**2010**

## Professional Activities

### Chairing

PC member for UIST2021, CSCW2022, MobileHCI2021, TEI2021 and 2022, DesForm 2019  
Student Innovation Contest Chair for UIST 2022  
Local Arrangement Chair UIST 2018

### Reviewer

CHI (2015-2022), UIST (2015-2021), and various other ACM conferences

### Special Recognitions for reviews (20 in total)

2x CHI22, 1x UIST21, 2x CHI21, 3x UIST20, CHI Play 20, 2x CHI20, 2x CHI18, 2x CHI15, 2x CHI16, CSCW15, CHI Play 15, CHI Play 14

### Community

Chairman of German CHI party (16,17,18)  
Moderator of CHI meta (2019 - now)

## References

Patrick Baudisch  
patrick.baudisch@hpi.de

Albrecht Schmidt  
albrecht.schmidt@um.ifi.lmu.de

Shengdong Zhao  
zhaosd@comp.nus.edu.sg

Jürgen Steimle  
steimle@cs.uni-saarland.de

Ellen Yi-Luen Do  
ellen.do@colorado.edu

## Invited Talks

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|---|--|
| [35] University of Michigan                 | [17] SIGCHI Paris  |
| [34] University of Virginia                 | [16] KAIST   |
| [33] University of Toronto, Canada          | [15] MIT Vision and Graphics seminar                         |
| [32] National Taiwan University             | [14] University of California Merced                         |
| [31] UCLA                                   | [13] University of Waterloo                                  |
| [30] Harvard University                     | [12] University of Copenhagen, Denmark                       |
| [29] University of Washington, Seattle      | [11] University of Calgary                                   |
| [28] MIT CSAIL                              | [10] University of Bristol, UK                               |
| [27] MIT Center for Bits and Atoms          | [9] Dartmouth College  |
| [26] MIT Media Lab                          | [8] A&M University of Texas                                  |
| [25] Carnegie Mellon University, Pittsburgh | [7] Kolding Design School tech seminar                       |
| [24] University of Chicago                  | [6] Dagstuhl Seminar on Computational Aspects of Fabrication |
| [23] UCSD                                   | [5] Saarland University, Germany                             |
| [22] University College London, UK          | [4] Ulm University, Germany                                  |
| [21] University of Maryland                 | [3] University of Cape Town                                  |
| [20] University of Tokyo                    | [2] LMU Munchen  |
| [19] National University of Singapore       | [1] Hasselt University                                       |
| [18] University of Colorado, Boulder        |  |

## Teaching

### Created Courses, primary lecturer at HPI

- |  |             |
|--|-------------|
| [2] Algorithmic Folding, master course | winter 2021 |
| [1] Algorithmic Folding, master course | winter 2020 |
- (evaluated by students with a 1.1 grade on a scale from 5.0-1.0 where 1.0 is the best grade)

### Teaching Assistant at HPI

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|--|--------------------|
| [7] Building Interactive Systems, bachelor course  | summer 2020 + 2021 |
| [5] Programming Technology 1, bachelor course      | winter 2019        |
| [4] Designing Interactive Systems, bachelor course | summer 2018 + 2019 |
| [2] Human Computer Interaction 1, bachelor course  | winter 2015 + 2016 |

### Created Courses at University of Southern Denmark

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|--|-------------|
| [2] Introduction to Arduino Programming, master+bachelor | summer 2013 |
| [1] Introduction to Arduino Programming, master+bachelor | winter 2013 |

## Mentoring

### Master thesis students (6 months fulltime)

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|-------------------|------|-----------------------------|------|
| [7] Ingo Apel     | 2020 | [3] Daniel Amadeus Glockner | 2019 |
| [6] Nico Böckhoff | 2020 | [2] Yannis Kommana          | 2018 |
| [5] Jonas Bounama | 2019 | [1] Willi Mueller           | 2016 |
| [4] Lukas Wagner  | 2019 |                             |      |

### Bachelor thesis students (1 year fulltime)

- |                     |      |
|---------------------|------|
| [4] Jeffrey Johnson | 2020 |
| [3] Benjamin Daniel | 2020 |
| [2] Ronja Wagner    | 2020 |
| [1] Ole Schlueter   | 2020 |

### Research intern (3 months fulltime)

[4] Romeo Sommerfeld	2021
[3] Ritesh Sharma	2020
[2] Vinayak Pushar	2019
[1] Ingo Apel	2019

### Master Project Students (6 months--3 days per week)

[8] Laurenz Seidel	2020	[4] Conrad Lempert	2019
[7] Erik Brendel	2020	[3] Ingo Apel	2019
[6] Lukas Rambold	2020	[2] Carl Goedecken	2019
[5] Markus Brand	2020	[1] Pascal Crenzin	2019

### Research project students (2 days per week for a semester)

[21] Julian Arnold	2021	[11] Philipp Hoberg	2017+18
[20] Tarik Alnawa	2020	[10] Melvin Witte	2016
[19] Hendrik Woehlert	2020	[9] Kieran Lomas	2016
[18] Laura Meister	2020	[8] Fabian Pottbaecker	2016
[17] Ingo Apel	2019+20	[7] Andreas Burmeister	2016
[16] Julius Rudolph	2019	[6] Yannis Komana	2016
[15] Felix Grzelka	2019	[5] Tobias Nack	2015
[14] Alexander Preuss	2018	[4] Tobias Duerschmid	2015
[13] Jonathan Janetzki	2018	[3] Bastian Kruck	2015
[12] Ivan Illic	2017+18	[2] Pascal Crenzin	2015
		[1] Jonathan Herdt	2015

## Awards/Honors

- [3] Social Design Award 2010 from City of Eindhoven for *the Wiggle*
- [2] Representng TU/E at the Dutch Design Week 2010
- [1] Nomination for Sønderborg Entrepreneurship Award 2012
- [\*] Finisher of the **NYC Marathon and Berlin Marathon** 2018 and 2019 with a best time of 03:16:27

## Non-Academic affiliations

*DKNL Design*, Denmark **2013-2014**

Interaction design consultant  
Concept and prototype development, main client: LEGO

*Stik Design*, Denmark, Netherlands **2010-2013**

Founder and Owner  
Product Design and Development.  
Products: the Wiggle (playground), Kuchi (promotional concept for entertainment parks), Yubi (promotional concept for festivals) and hourly paid design work

*EST Fellenoord*, Netherlands **2010-2011**

Board position as Commissioner Internal Affairs  
For a year I was boardmember of this student tennis association with over 400 members, responsible for internal communication and chairing the internal committees + organizing the bar and events

*Brabant Center of Entrepreneurship*, Netherlands **2010-2011**

Completed the Technology Entrepreneurship certificate program