

# Thijs Roumen - CV

Assistant Professor IS and CS, Cornell Tech  
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## Academic Affiliations

*Cornell Tech, NYC, USA* **2022-now**  
Assistant Professor (Tenure-Track) in Information Science, Computer Science field member

## Education

*Hasso Plattner Institute, Germany* **2014-2022**  
Ph.D. in Human Computer Interaction (**summa cum laude**)  
Advisor: Patrick Baudisch, external reviewers: Albrecht Schmidt, Takeo Igarashi

*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

- [15] **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**
- [14] **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**
- [13] **Thijs Roumen**, Ingo Apel, Jotaro Shigeyama, Abdullah Muhammad, and Patrick Baudisch. Kerf-Canceling Mechanisms: Making Laser-Cut Mechanisms Operate across Different Laser Cutters. **UIST20**
- [12] **Thijs Roumen**, Jotaro Shigeyama, Julius Cosmo Romeo Rudolph, Felix Grzelka, and Patrick Baudisch. SpringFit: Joints and Mouns that Fabricate on Any Laser-Cutter. **UIST19**
- [11] **Thijs Roumen**, Willie Mueller and Patrick Baudisch. grafter: remxing 3D printed Machines. **CHI18**
- [10] **Thijs Roumen**, Bastian Kruck, Tobias Duerschmid, Tobias Nack, Patrick Baudisch. Mobile Fabrication. **UIST16**
- [9] 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**

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

[7] 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**

[6] 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**  
**Best Paper Honorable Mention (best 5%)**

[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**

## Department Service

### Committee Member

2022 PhD admissions in IS

2022 PhD admissions in CS

# Academic Community Service

## Committees

PC member for UIST2021-22, CHI2023, NSF GRFP 2022, CSCW2022, MobileHCI2021, TEI2021-22, DesForm 2019  
Best Paper Committee UIST2022  
Student Innovation Contest Chair for UIST 2022  
Local Arrangement Chair UIST 2018

## Reviewer

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

## Special Recognitions for reviews (21 in total)

1x DIS22, 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 (16,17,18,19), Moderator of CHI meta (2019 - now)

## Invited Talks

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|---|--|
| [39] Cornell Tech, NYC                      | [19] National University of Singapore                        |
| [38] University of Montreal                 | [18] University of Colorado, Boulder                         |
| [37] Cornell, Ithaca                        | [17] SIGCHI Paris  |
| [36] UIUC                                   | [16] KAIST   |
| [35] Stanford University                    | [15] MIT Vision and Graphics seminar                         |
| [34] University of Michigan                 | [14] University of California Merced                         |
| [33] UCSD                                   | [13] University of Waterloo                                  |
| [32] National Taiwan University             | [12] University of Copenhagen, Denmark                       |
| [31] UCLA                                   | [11] University of Calgary                                   |
| [30] Harvard University                     | [10] University of Bristol, UK                               |
| [29] University of Washington, Seattle      | [9] Dartmouth College  |
| [28] MIT CSAIL                              | [8] A&M University of Texas                                  |
| [27] MIT Center for Bits and Atoms          | [7] Kolding Design School tech seminar                       |
| [26] MIT Media Lab                          | [6] Dagstuhl Seminar on Computational Aspects of Fabrication |
| [25] Carnegie Mellon University, Pittsburgh | [5] Saarland University, Germany                             |
| [24] University of Chicago                  | [4] Ulm University, Germany                                  |
| [23] University of Toronto, Canada          | [3] University of Cape Town                                  |
| [22] University College London, UK          | [2] LMU Munchen  |
| [21] University of Maryland                 | [1] Hasselt University                                       |
| [20] University of Tokyo                    |  |

## Teaching

### Primary Instructor at Cornell Tech

[2] Digital Fabrication, 50 master students	spring 2023
[1] HCI and Design, 200 master students	fall 2022

### 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

[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

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

## Mentoring

### PhD students (primary advisor)

[1] Amrit Kwatra	2022 -
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### PhD students (co-advisor)

[1] Ilan Mandel	2022 -
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### PhD students (committee)

[1] Zekun Chang	2022 -
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### Master thesis students (6 months fulltime)

[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		
[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
[11] Philipp Hoberg	2017+18	[1] Jonathan Herdt	2015

## Awards/Honors

- [4] Honorable Mention Award UIST'21 (best 5% of papers)
- [3] Social Design Award 2010 from City of Eindhoven for *the Wiggle*
- [2] Representing 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