

Martin Taraz

martin.taraz@hpi.de

Education

- since (pursuing) **Doctorate IT Systems Engineering** at Hasso-Plattner-Institute (HPI), Potsdam, Germany with Prof. Dr. Patrick Baudisch
- Sep 2022
- May 2020 **M.Sc. IT Systems Engineering** at Hasso-Plattner-Institute (HPI), Potsdam, Germany
- Aug 2022 Thesis: “Automatic Calibration of Laser Cutters” with Prof. Dr. Patrick Baudisch
- Sep 2020 **M.Sc. Data Engineering** at Hasso-Plattner-Institute (HPI), Potsdam, Germany
- May 2021
- Sep 2017 **B.Sc. IT Systems Engineering** at Hasso-Plattner-Institute (HPI), Potsdam, Germany
- Aug 2020 Thesis: “Automatic Reinforcement of Closed Box Structures” with Prof. Dr. Patrick Baudisch
- Sep 2015 **B.Sc. Computer Science** at Freie Universität Berlin (FU), Germany
- Aug 2017
- until **Abitur** at Werner von Siemens Gymnasium Berlin
- July 2015

Work Experience

- Sep 2019 **Graduate Student Research Assistant** at the Human-Computer-Interaction Lab of Prof. Patrick Baudisch at HPI, Potsdam, Germany
- May 2020 designed and implemented virtual reality experiences for use in confined spaces
- Sep 2019 **Freelancer** at Institut für Gesundheitsforschung, Berlin, Germany
- Oct 2021 Designing and implementing features for the Conquary Project
- before 2019 miscellaneous positions in software development

Full Paper Publications

Lukas Rambold, Robert Kovacs, Conrad Lempert, Muhammad Abdullah, Helena Lendowski, Lukas Fritzsche, **Martin Taraz**, and Patrick Baudisch *AirTied: Automatic Personal Fabrication of Truss Structures* (UIST’23)

Shohei Katakura, **Martin Taraz**, Muhammad Abdullah, Paul Methfessel, Lukas Rambold, Robert Kovacs, Patrick Baudisch *Kerfmeter: Automatic Kerf Calibration for Laser Cutting* (CHI’23)

Muhammad Abdullah, 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, Patrick Baudisch *HingeCore: Laser-Cut Foamcore for Fast Assembly* (CHI’22)

Muhammad Abdullah, **Martin Taraz**, Yannis Kommana, Shohei Katakura, Robert Kovacs, Jotaro Shigeyama, Thijs Roumen, Patrick Baudisch
FastForce: Real-Time Reinforcement of Laser-Cut Structures (CHI'21)

Thijs Roumen, Ingo Apel, Thomas Kern, **Martin Taraz**, Ritesh Sharma, Ole Schlueter, Jeffrey Johnson, Dominik Meier, Conrad Lempert, Patrick Baudisch
Structure-Preserving Editing of Plates and Volumes for Laser Cutting (SCF'22)

Maximilian Böther, Otto Kißig, **Martin Taraz**, Sarel Cohen, Karen Seidel, Tobias Friedrich
What's Wrong with Deep Learning in Tree Search for Combinatorial Optimization (ICLR'22)

Teaching

Teaching assistant at HPI

Building Interactive Devices, bachelor course (Winter 2021, 2022, 2023, 2024)

Mentoring

Master thesis Students (6 months fulltime – primary advisor)

[3] Antonius Naumann
[2] Robin Wersich
[1] Lukas Budach

Bachelor thesis Students (1 year fulltime – primary advisor)

[5] Björn Langer
[4] Cedric Rische
[3] Matteo Voges
[2] Paul Panterodt
[1] Kiru Spreu

Master Project Students (6 months – 3 days per week)

[6] Antonius Naumann
[5] Robin Wersich
[4] Jonathan Grenda
[3] Halil Goecer
[2] Lukas Budach
[1] Valentin Schröter

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

Antonius Naumann

Jonathan Grenda

Fritz Oeltermann

Skills

full stack software engineering with JavaScript, Python, Java, Scala, Ruby, Julia, C++ & others. Worked on projects involving data visualization, high-performance numerical computing, database systems, computer graphics, machine learning, web development, DevOps, distributed systems, embedded software and many other aspects

languages: English (fluent), German (native), French (beginner)

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