# Simon Stepputtis

simonstepputtis.com | Researchgate | Google Scholar

- **University:** Arizona State University
- **Mail:** sstepput@asu.edu

## EDUCATION

### PHD. STUDENT | Computer Science | Since December 2016

Arizona State University | School of Computing, Informatics, and Decision Systems Engineering

- My research is focusing on Human-Robot Interaction to push the boundaries from pre-programmed workers to adaptive human-robot teams.

### MASTER OF SCIENCE | Engineering & Computing | November 2016

TU Freiberg | Faculty of Mechanical, Energy and Process Engineering

Thesis: "A data driven approach for triadic interactions in human robot interaction"

- Aiming at the fundamental concept of ownerships during hand-over tasks, this thesis presents a novel framework to model grasp timings in human-robot interactions.

### BACHELOR OF SCIENCE | Engineering & Computing | March 2015

TU Freiberg | Faculty of Mechanical, Energy and Process Engineering

Thesis: "Upper body tracking for avatar visualisation in HMD-based virtual reality"

## PUBLICATIONS

### UNDER REVIEW | 2018

International Conference on Robotics and Automation (ICRA 2018)| Paper

### AUTONOMOUS ROBOTS JOURNAL | 2017

David Vogt, Simon Stepputis, Bernhard Jung, Heni Ben Amor

"One-shot Learning of Human-Robot Handovers with Triadic Interaction Meshes" | Springer, Accepted

### INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS) | 2017

Simon Stepputtis, Chitta Baral, Heni Ben Amor

"Speech Enhanced Imitation Learning and Task Abstraction for Human-Robot Interaction" | Workshop: Synergies Between Learning and Interaction

### ROBOTICS: SCIENCE AND SYSTEMS (RSS) | 2017

Simon Stepputtis, Heni Ben Amor

"Deep Predictive Models for Active Slip Control" | Workshop: (Empirically) Data-Driven Robotic Manipulation

### ROBOTICS: SCIENCE AND SYSTEMS (RSS) | 2017

Simon Stepputtis, Heni Ben Amor

"Active Slip Control for In-Hand Object Manipulation using Deep Predictive Models" | Workshop: Tactile Sensing for Manipulation: Hardware, Modeling, and Learning

### INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION (ICRA) | 2017

D Vogt, S Stepputtis, S Grehl, B Jung, HB Amor

"A System for Learning Continuous Human-Robot Interactions from Human-Human Demonstrations" | DOI: 10.1109/ICRA.2017.7989334

### INTERNATIONAL CONFERENCE ON HUMANOID ROBOTS (HUMANOIDS) | 2016

D Vogt, S Stepputtis, R Weinhold, B Jung, HB Amor | Best Video Award

"Learning Human-Robot Interactions from Human-Human Demonstrations (with Applications in Lego Rocket Assembly)" | DOI: 10.1109/HUMANOIDS.2016.7803267

# ACADEMIC WORK

## COMMUNITY WORK

ICRA 2018: Reviewer
IROS 2017: Program Committee | Workshop on Synergies between Learning and Interaction
IROS 2017: Reviewer

## TEACHING ASSISTANT

Arizona State University | School of Computing, Informatics, and Decision Systems Engineering

- Teaching assistant | Artificial Intelligence | Fall 2017
- Teaching assistant | Advances in Robot Learning | Spring 2017
- Teaching assistant | Object Orientated Programming and Data Structures | Spring 2017

TU Freiberg | Faculty of Mathematics and Computer Science

- Teaching assistant | Basics of Computer Science | Winter 2012
- Teaching assistant | Basics of Computer Science | Winter 2013

## RESEARCH ASSISTANT

Arizona State University | School of Computing, Informatics, and Decision Systems Engineering

- Research assistant | Interactive Robotics Lab | Since Summer 2017

TU Freiberg | Faculty of Mathematics and Computer Science

- Research assistant | Scientific visualization | Summer 2014
- Research assistant | Human Robot Interaction | Spring 2015 until Fall 2016

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# AWARDS

- **CIDCE Doctoral Fellowship** Arizona State University | Spring 2017
- **Best Video Award** Humanoids 2016

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# INTERNSHIPS

## APROMACE DATA SYSTEMS | September 2014 - December 2014

Freiberg (Saxony)
Activities and Experiences:

- Insight into the usage and development of a MES-System.
- Development and porting of an interpreter for an inhouse developed programming language
- Extensive programming of C++11 and Qt5.5

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# SKILLS

## LANGUES

- **Linguistic** German • English • Latin
- **Computer Science** C • C++ • Python • TensorFlow • CUDA • Java • Matlab • SQL