CHRISTOPHER THIERAUF

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Roboticist, PhD Student

WHO AM I?

Robotics engineer currently working as a graduate research assistant while pursuing a PhD in Human-Robot Interaction from the HRI Lab at Tufts University. I'm interested in designing, building, and programming robots and systems that allow us to better explore robots in human domains.

RESEARCH

Research in resilience in human-robot interaction, involving topics ranging from machine learning, vision processing, kinematics, cognitive architectures, and robot design.

LANGUAGES

Comfort in Python, Java, C, C++, Bash, Some experience with x86 Assembly, R, Prolog, F#

DEVICES

Fetch Robotics 'Fetch', Universal Robots 'UR5', Kinova 'ULeA', Willow Garage 'PR2'

FRAMEWORKS

ROS1, ROS2, MoveIt, ROS_Control, OpenCV, PCL, Gazebo, PyBullet

OTHER SKILLS

Advanced CLI usage, Proficency in mechanical design and FDM, Comfort with electrical design and debug

EDUCATION

Ongoing

2020 – Present (est. 2026)	**PhD, Human-Robot Interaction** Joint PhD in Computer Science and Psychology.	**Tufts University**
2020 – Present (est. 2022)	**MSc, Human-Robot Interaction** Joint Masters in Computer Science and Psychology. Research focusing on resilient robots in human domains.	**Tufts University**

Completed

2016 – 2020	**BSc, Computer Science (minoring in Applied Mathematics)** Bachelor's in Computer Science, with emphasis on robotics.	**Wentworth Institute of Technology**

RESEARCH

Graduate Level

2021	**Refereed Conference Paper** "Robot Development and Path Planning for Indoor Ultraviolet Light Disinfection." *Jonathan Conroy,* **Christopher Thierauf**, *Parker Rule, Evan Krause, Hugo Akitaya, Andrei Gonczi, Matias Korman, Matthias Scheutz.* Proceedings of the 2021 IEEE International Conference on Robotics and Automation.	**ICRA 2021**

Undergraduate Level

2019	**Lecture** "Free Software in the 3D Printing Community." **Christopher Thierauf**. LibrePlanet 2019.	**LibrePlanet 2019**
2018	**Refereed Conference Paper** "Networking 3D Printers with Printfarmer." **Christopher Thierauf**. IEEE MIT Undergraduate Research Technology Conference, 2018.	**IEEE MIT URTC 2018**
2018	**Fulfilled Grant Requirements** "Laser Scarecrow Prototype." *Stephen Chomyszak, Nick Stratton,* **Christopher Thierauf***, Ken Costa.* In fulfillment of SARE FNE18-893 awarded to Elliot Farm.	**Northeast SARE FNE18-893**

EXPERIENCE

Summer 2021	**Graduate Robotics Co-Op**	**Thinking Robots, Inc.**

Designed and manufactured robot add-ons to meet grant requirements for mobile disinfection system. Wrote code to accompany robot add-ons.

May '20 – Present	**Graduate Research Assistant, Human-Robot Interaction**	**Tufts University**

Conducted research on behalf of Matthias Scheutz in the Human-Robot Interaction Lab, Tufts University

Fall 2019	**Software Engineering Co-Op**	**Thinking Robots, Inc.**

Wrote code to interface between natural language goal-control system and humanoid robot.

Spring 2019	**Undergraduate Research Assistant, Human-Robot Interaction**	**Tufts University**

Wrote code contributing to grant for assitive robotics system interfacing natural language to a 7-DoF arm.

Summer 2018	**Undergraduate Research Assistant, Additive Manufacturing**	**Thinking Robots, Inc.**

Contributed to software, electrical, and mechanical design of novel 3D printing system.