



Sayantan Auddy

Machine Learning and Robotics Researcher

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[Google Scholar](#) • [GitHub](#) • [LinkedIn](#)

RESEARCH INTERESTS

Continual learning • Robotics • Deep reinforcement learning • Deep learning

WORK EXPERIENCE

RESEARCH AND TEACHING

Scientific Staff and Teaching Assistant

Oct, 2018 - Jan, 2024

Department of Computer Science, University of Innsbruck, Austria

- Research on continual learning in robotics and reinforcement learning
- Reviewer for machine learning/robotics journals (RA-L, TPAMI, RAS, TCDS) and conferences (CoRL, ICRA, IROS, AAI, ROMAN, ICDL)
- Associate Editor, International Conference on Ubiquitous Robots
- Teaching machine learning lectures and seminars; B.Sc. and M.Sc. theses supervision; development of teaching content

Student (Research) Assistant

Computer Vision group, University of Hamburg, Germany

May, 2017 - Mar, 2018

Max-Planck-Institute for Meteorology, Hamburg, Germany

Sep, 2015 - Mar, 2018

Machine Learning group, University of Hamburg, Germany

Mar, 2015 - Aug, 2015

INDUSTRY EXPERIENCE

Consultant | Capgemini India Pvt. Ltd., India

Feb, 2014 - Aug, 2014

- Data warehouse application development

Associate | Cognizant Technology Solutions India Pvt. Ltd., India

Jan, 2013 - Feb, 2014

- Data warehouse application development

Senior Systems Engineer | Infosys Limited, India

Dec, 2009 - Dec, 2012

- Data warehouse application development and optimization

EDUCATION

PhD student | Computer Science

Oct, 2018 - Present

University of Innsbruck, Austria

Dissertation topic: Continual learning for robotics

Master of Science | Intelligent Adaptive Systems

Oct, 2014 - Jan, 2018

University of Hamburg, Germany

Passed with distinction [[thesis](#)]

Bachelor of Technology | Computer Science & Engineering

Aug, 2005 - Aug, 2009

West Bengal University of Technology, India

SELECTED AWARDS

Doctoral Scholarship for the Promotion of Young Talent Awarded by the University of Innsbruck, Vice-Rectorate for Research	Jun, 2024
Deutschlandstipendium (Germany Scholarship) Awarded by the German Federal Ministry of Education & Research	Jan, 2016
Infosys MFG Star Award Business unit-level recognition conferred by Infosys Limited	Jun, 2012

SKILLS

<i>Programming</i>	Python, Shell Scripting, Java, C++
<i>Machine Learning/Robotics</i>	PyTorch, Tensorflow, Scikit, ROS, Gazebo, CoppeliaSim
<i>Infrastructure</i>	GPU cluster and Slurm, Docker, Apptainer/Singularity
<i>Databases</i>	Teradata, Oracle, SQL Scripting

LANGUAGES

English (fluent), German (A2), Bengali (native), Hindi (fluent)

SELECTED PUBLICATIONS

Continual Learning from Demonstration of Robotics Skills [paper] [code] <i>S. Auddy, J. Hollenstein, M. Saveriano, A. Rodríguez-Sánchez, J. Piater</i> <i>Robotics and Autonomous Systems (RAS)</i> <i>Conference on Lifelong Learning Agents (CoLLAs) - Journal Track</i>	2023
Continual Domain Randomization [paper] [code] <i>J. Josifovski*, S. Auddy*, M. Malmir, J. Piater, A. Knoll, N. Navarro-Guerrero</i> <i>International Conference on Intelligent Robots and Systems (IROS)</i> * Equal contribution	2024
Hierarchical Control for Bipedal Locomotion using Central Pattern Generators and Neural Networks [paper] [code] <i>S. Auddy, S. Magg, S. Wermter</i> <i>IEEE International Conference on Development and Learning (ICDL)</i>	2019
Action Noise in Off-Policy Deep Reinforcement Learning: Impact on Exploration and Performance [paper] <i>J. Hollenstein, S. Auddy, M. Saveriano, E. Renaudo, J. Piater</i> <i>Transactions on Machine Learning Research (TMLR)</i>	2022

SELECTED PREPRINTS (under review)

Scalable and Efficient Continual Learning from Demonstration via Hypernetwork-generated Stable Dynamics Model [paper] [code] <i>S. Auddy, J. Hollenstein, M. Saveriano, A. Rodríguez-Sánchez, J. Piater</i>	2024
Direct Imitation Learning-based Visual Servoing using the Large Projection Formulation [paper] [code] <i>S. Auddy*, A. Paolillo*, J. Piater, M. Saveriano</i> * Equal contribution	2024

Please visit my [Google Scholar profile](#) for the full publication list.

SELECTED PRESENTATIONS

<i>Talk</i>	Continual AI Unconference (online)	Oct, 2023
<i>Poster</i>	Conference on Lifelong Learning Agents (Montreal, Canada)	Aug, 2023
<i>Talk</i>	Lifelong Learning workshop at RO-MAN (online)	Sep, 2020
<i>Talk</i>	International Conference on Development & Learning (Oslo, Norway)	Aug, 2019

CERTIFICATIONS

Deep Learning Specialization <i>Coursera</i>	Aug, 2018
Introduction to Robotics <i>QUT, Australia</i>	May, 2015
Teradata 12 Certified Professional <i>Teradata</i>	Sep, 2013
Sun Certified Programmer for the Java 2 Platform <i>Sun Microsystems</i>	Jun, 2009