2022 Swedish Artificial Intelligence Society Workshop (SAIS 2022)

Stockholm, Sweden 13 – 14 June 2022



IEEE Catalog Number: CFP22AS1-POD ISBN: 978-1-6654-7127-5

Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP22AS1-POD

 ISBN (Print-On-Demand):
 978-1-6654-7127-5

 ISBN (Online):
 978-1-6654-7126-8

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



2022 Swedish Artificial Intelligence Society Workshop (SAIS)

Table of contents

Paper	Title	Authors	Pages
1	Out-of-distribution in Human Activity Recognition	Debaditya Roy, Vangjush Komini, and Sarunas Girdzijauskas	1-10
2	Mixing temporal experts for Human Activity Recognition	Debaditya Roy and Sarunas Girdzijauskas	11-18
3	Language-agnostic Age and Gender Classification of Voice using Self-supervised Learning	Fredrik Lastow, Edwin Ekberg and Pierre Nugues	19-27
4	Slope and Generalization Properties of Neural Networks	Anton Johansson, Niklas Engsner, Claes Strannegård, and Petter Mostad	28-36
5	Ecosystem Models Based on Artificial Intelligence	Claes Strannegård, Niklas Engsner, Jesper Eisfeldt, John Endler, Amanda Hansson, Rasmus Lindgren, Petter Mostad, Simon Olsson, Irene Perini, Heather Reese, Fulya Taylan, Simon Ulfsbäcker, and Ann Nordgren	37-45
6	Magic in Human-Robot Interaction (HRI)	Martin Cooney and Alexey Vinel	46-55
7	Optimization of the Hybrid Feature Learning Algorithm	Monisha Srihari, Zahra Gholipour, Reza Khoshkangini, and Abbas Orand	56-63
8	SIAMBERT: Siamese Bert-based Code Search	Francisco J. Peña, Angel Luis Gonzalez, Sepideh Pashami, Ahmad Al-Shishtawy, and Amir H. Payberah	64-70
9	Homomorphic encryption enables private data sharing for digital health: winning entry to the Vinnova innovation competition Vinter 2021-22	Rickard Brännvall, Henrik Forsgren, Helena Linge, Marina Santini, Alireza Salehi, and Fatemeh Rahimian	71-80