

2021 Swedish Workshop on Data Science (SweDS 2021)

**Växjö, Sweden
2-3 December 2021**



**IEEE Catalog Number: CFP21Y91-POD
ISBN: 978-1-6654-1831-7**

**Copyright © 2021 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:	CFP21Y91-POD
ISBN (Print-On-Demand):	978-1-6654-1831-7
ISBN (Online):	978-1-6654-1830-0

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

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

Original Full Papers (Published Proceedings Track)

- 1 Machine Learning-Assisted Analysis of Small Angle X-Ray Scattering
Piotr Tomaszewski, Shun Yu, Markus Borg, and Jerk Rönöols
- 7 A Novel Deep Learning Based Model for Classification of Rice Leaf Diseases
Amartya Bhattacharya
- 13 Classifying Fake and Real Neurally Generated News
Anitha Govindaraju and Josephine Griffith
- 20 An Interdisciplinary Web-Based Framework for Data-Driven Placement Analysis of CCTV Cameras
Kenneth Lewenhagen, Martin Boldt, Anton Borg, Manne Gerell, and Johan Dahlén
- 26 DeepGRASS: Graph, Sequence and Scaled Embeddings on Large Scale Transactions Data
Mahesh Balan Umaithanu, Vignesh Ravichandran, Rohith Srinivaas Mohanakrishnan, and Venkat Subramanian Selvaraj
- 32 Machine Learning for Social Sciences: Stance Classification of User Messages on a Migrant-Critical Discussion Forum
Victoria Yantseva and Kostiantyn Kucher
- 40 SBGTool: Similarity-Based Grouping Tool for Students' Learning Outcomes
Zeynab Mohseni, Rafael M. Martins, and Italo Masiello
- 47 Self-Similarity of Twitter Users
Masoud Fatemi, Kostiantyn Kucher, Mikko Laitinen, and Pasi Fränti
- 54 Predicting Security Vulnerabilities Using Software Code Metrics
Sundarakrishnan Ganesh, Tobias Olsson, and Francis Palma

Extended Abstracts (Non-Archival Track)

Empirical Study: Visual Analytics for Comparing Stacking to Blending Ensemble Learning

Angelos Chatzimparmpas, Rafael M. Martins, Kostiantyn Kucher, and Andreas Kerren

Dynamic Ranking of IEEE VIS Author Importance

Daniel Witschard, Ilir Jusufi, and Andreas Kerren

Understanding Customer Preference for Sustainability Information Using Machine Learning

Sze Yin Kwok, Apoorva Kothapally, Vedasree Reddy Sapatapu, and Veselka Boeva

Understanding Traffic Cruising Causation via Parking Data Enhancement

Mirza Jasarevic, Veselka Boeva, Fredrik Sjölin, and Per-Olav Gramstad

Continuous Pattern Mining via Graph-Based Multi-View Clustering

Christoffer Åleskog, Vishnu Manasa Devagiri, and Veselka Boeva

Mining for Recurring Themes in Speech Recording Descriptions

Maria Skeppstedt, Magnus Ahltop, Rickard Domeij, Gunnar Eriksson, and Jenny Öqvist

Automatic Generation of Individualized Programming Problems

Daniel Toll, Morgan Ericsson, Anna Wingkvist, and Dustin Payne

Mining SCADA Protocol For Anomaly Detection

Mahwish Anwar, Anton Borg, and Lars Lundberg

Model Validation: A Holistic Framework for Model Monitoring

Sundaraparipurnan Narayanan

PUF: Positive and Unlabeled Learning Using Pseudo F Measure

Mahesh Balan Umaithanu, Rohith Srinivaas Mohanakrishnan, and Venkat Subramanian Selvaraj

Data Center Load Balancing Under Homomorphic Encryption

Rickard Brännvall, Gokturk Yuksek, and Kanad Ghose