AAAI Workshops 2018

Technical Report WS-14

New Orleans, Louisiana, USA 2 – 3 February 2018

ISBN: 978-1-7138-2756-6

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright $\ \, \ \,$ (2018) by Association for the Advancement of Artificial Intelligence All rights reserved.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact Association for the Advancement of Artificial Intelligence at the address below.

Association for the Advancement of Artificial Intelligence 2275 East Bayshore Road Suite 160 Palo Alto, California 94303 USA

Phone: 1-650-328-3123 Fax: 1-650-321-4457

https://aaai.org/Press/press.php

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

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

AUTOMATED REFACTORING OF OBJECT-ORIENTED CODE USING CLUSTERING	
ENSEMBLES	754
Timofey Bryksin, Alexey Shpilman, Daniel Kudenko	
CROSS-LANGUAGE LEARNING FOR PROGRAM CLASSIFICATION USING BILATERAL	
TREE-BASED CONVOLUTIONAL NEURAL NETWORKS	758
Nghi D. Q. Bui, Lingxiao Jiang, Yijun Yu	
TOWARDS TRACEABILITY LINK RECOVERY FOR SELF-ADAPTIVE SYSTEMS	762
Reihaneh H. Hariri, Erik M. Fredericks	
EXTRACTING INFORMATION TYPES FROM ANDROID LAYOUT CODE USING	
SEQUENCE TO SEQUENCE LEARNING	767
Mitra Bokaei Hosseini, Xue Qin, Jianwei Niu	
STATISTICAL MACHINE TRANSLATION IS A NATURAL FIT FOR AUTOMATIC	
IDENTIFIER RENAMING IN SOFTWARE SOURCE CODE	771
Jeremy Lacomis, Alan Jaffe, Edward J. Schwartz, Claire Le Goues, Bogdan Vasilescu	
NATURAL LANGUAGE PROCESSING AND PROGRAM ANALYSIS FOR SUPPORTING	
TODO COMMENTS AS SOFTWARE EVOLVES	775
Pengyu Nie, Junyi Jessy Li, Sarfraz Khurshid, Raymond Mooney, Milos Gligoric	
TOWARDS J.A.R.V.I.S. FOR SOFTWARE ENGINEERING: LESSONS LEARNED IN	
IMPLEMENTING A NATURAL LANGUAGE CHAT INTERFACE	779
Rahul Pandita, Steven Bucuvalas, Hugolin Bergier, Aleksandar Chakarov, Elizabeth Richards	
EVALUATION OF TYPE INFERENCE WITH TEXTUAL CUES	783
Amirreza Shirani, A. Pastor Lopez-Monroy, Fabio Gonzalez, Thamar Solorio, Mohammad	
Amin Alipour	
USING NATURAL LANGUAGE PROCESSING FOR DOCUMENTATION ASSIST	787
Alexandre Terrasa, Jean Privat, Guy Tremblay	
GENERATING REGULAR EXPRESSIONS FROM NATURAL LANGUAGE	
SPECIFICATIONS: ARE WE THERE YET?	791
Zexuan Zhong, Jiaqi Guo, Wei Yang, Tao Xie, Jian-Guang Lou, Ting Liu, Dongmei Zhang	

Author Index