



Fig. 2. Paper search and selection process.

TABLE I
NUMBER OF PAPERS WITHIN SCOPE ANALYZED/PUBLISHED, AND EXPERIMENTS ANALYZED (IN PARENTHESIS)

	ICSE	ESEC/FSE	TSE	TOTAL
2018	2/2 (5)	4/4 (11)	0/0 (0)	6/6 (16)
2019	8/8 (27)	4/4 (9)	1/1 (6)	13/13 (42)
2020	7/7 (25)	6/6 (21)	3/3 (14)	16/16 (60)
2021	7/15 (21)	7/15 (32)	6/11 (23)	20/41 (76)
Total	24/32 (78)	21/29 (73)	10/15 (43)	55/76 (194)

Results of the search and selection process

Total papers published	2018	2019	2020	2021	Total	Comments
ICSE	105	109	129	138	481	Found in messages from PCs
ESEC/FSE	61	74	101	97	333	Found in messages from PCs
TSE	59	58	63	160	340	Found in WOS
TOTAL	225	241	293	395	1154	

SCOPUS Search	2018	2019	2020	2021	Total
ICSE	15	39	56	65	175
ESEC/FSE	24	33	43	65	165
TSE	7	20	14	63	104
TOTAL	46	92	113	193	444

No DNNs	2018	2019	2020	2021	Total
ICSE	12	25	31	34	102
ESEC/FSE	15	20	22	40	97
TSE	3	16	10	48	77
TOTAL	30	61	63	122	276

Engineering DL solutions	2018	2019	2020	2021	Total
ICSE	1	4	16	16	37
ESEC/FSE	1	5	14	9	29
TSE	0	0	0	2	2
TOTAL	2	9	30	27	68

ML but not DL	2018	2019	2020	2021	Total
ICSE	0	2	2	0	4
ESEC/FSE	4	4	1	1	10
TSE	4	3	1	2	10
TOTAL	8	9	4	3	24

Total excluded	2018	2019	2020	2021	Total
ICSE	13	31	49	50	143
ESEC/FSE	20	29	37	50	136
TSE	7	19	11	52	89
TOTAL	40	79	97	152	368

Total included	2018	2019	2020	2021	Total
ICSE	2	8	7	15	32
ESEC/FSE	4	4	6	15	29
TSE	0	1	3	11	15
TOTAL	6	13	16	41	76

Analyzed papers	2018	2019	2020	2021	Total
ICSE	2	8	7	7	24
ESEC/FSE	4	4	6	7	21
TSE	0	1	3	6	10
TOTAL	6	13	16	20	55

Results of SCOPUS search for ICSE 2018

Authors	Title	Year	Art. No.	Page start	Page end	Page count	DOI	Type
Jana S., Tian Y., Pei K	DeepTest: Automated testing of de	2018	3180220	303	314	12	10.1145/3180155.3180220	Engineering DNNs
Chen C., Su T., Meng C	From UI design image to GUI skele	2018		665	676	12	10.1145/3180155.3180240	DNN-based software
Phan H., Nguyen H.A.,	Statistical learning of API fully qualif	2018		632	642	11	10.1145/3180155.3180230	No DNN
Rath M., Rendall J., G	Traceability in the wild: Automaticall	2018		834	845	12	10.1145/3180155.3180207	No DNN
Gu X., Zhang H., Kim S	Deep code search	2018		933	944	12	10.1145/3180155.3180167	DNN-based software
Madala K., Do H., Acei	A combinatorial approach for expos	2018		910	920	11	10.1145/3180155.3180204	No DNN
Chowdhury S.A., Mohi	Automatically finding bugs in a cor	2018		981	992	12	10.1145/3180155.3180231	No DNN
Mendez C., Padala H.S	Open source barriers to entry, revisi	2018		1004	1015	12	10.1145/3180155.3180241	No DNN
Abdessalem R.B., Neja	Testing vision-based control system	2018		1016	1026	11	10.1145/3180155.3180160	No DNN
Agrawal A., Menzies T	Is "better data" better than "better d	2018		1050	1061	12	10.1145/3180155.3180197	No DNN
Spadini D., Aniche M.,	When testing meets code review: W	2018		677	687	11	10.1145/3180155.3180192	No DNN
Xu Z., Ma S., Zhang X.	Debugging with intelligence via pro	2018		1171	1181	11	10.1145/3180155.3180237	No DNN
Wang P., Svajlenko J.,	CCAligner: A token based large-gap	2018		1066	1077	12	10.1145/3180155.3180179	No DNN
Kim K., Kim D., Bissya	FACoY: A code-to-code search eng	2018		946	957	12	10.1145/3180155.3180187	No DNN
Xiong Y., Liu X., Zeng	Identifying patch correctness in test	2018		789	799	11	10.1145/3180155.3180182	No DNN

Results of SCOPUS search for ICSE 2019

Authors	Title	Year	Art. No.	Page start	Page end	Page count	DOI	Type
Wang J., Dong G., Sun J., V	Adversarial Sample Detection for Deep Neural Network throu	2019	8812047	1245	1256	12	10.1109/ICSE.2019.00126	Engineering DNNs
Zhao D., Xing Z., Chen C., X	ActionNet: Vision-Based Workflow Action Recognition from	2019	8811922	350	361	12	10.1109/ICSE.2019.00049	DNN-based software
Hellendoorn V.J., Proksch S	When Code Completion Fails: A Case Study on Real-World	2019	8812116	960	970	11	10.1109/ICSE.2019.00101	Engineering DNNs
Miller K., Kwon Y., Sun Y.,	Probabilistic Disassembly	2019	8812038	1187	1198	12	10.1109/ICSE.2019.00121	No DNN
Ki T., Park C.M., Dantu K.,	Mimic: UI Compatibility Testing System for Android Apps	2019	8811983	246	256	11	10.1109/ICSE.2019.00040	No DNN
Ha H., Zhang H.	DeepPerf: Performance Prediction for Configurable Software	2019	8811988	1095	1106	12	10.1109/ICSE.2019.00113	DNN-based software
Yang Y., Zhou Y., Sun H., S	Hunting for Bugs in Code Coverage Tools via Randomized	2019	8812045	488	499	12	10.1109/ICSE.2019.00061	No DNN
Leclair A., Jiang S., McMill	A Neural Model for Generating Natural Language Summaries	2019	8811932	795	806	12	10.1109/ICSE.2019.00087	DNN-based software
Huang Y., Liu X., Krueger F	Distilling Neural Representations of Data Structure Manipula	2019	8812086	396	407	12	10.1109/ICSE.2019.00053	No DNN
Amar A., Rigby P.C.	Mining Historical Test Logs to Predict Bugs and Localize Fa	2019	8812113	140	151	12	10.1109/ICSE.2019.00031	No DNN
He Z., Chen Y., Huang E., W	A System Identification Based Oracle for Control-CPS Softw	2019	8811955	116	127	12	10.1109/ICSE.2019.00029	No DNN
Philip A.A., Bhagwan R., Ku	FastLane: Test Minimization for Rapidly Deployed Large-Sca	2019	8812033	408	418	11	10.1109/ICSE.2019.00054	ML no DL
Tran H., Tran N., Nguyen S.	Recovering Variable Names for Minified Code with Usage Co	2019	8812034	1165	1175	11	10.1109/ICSE.2019.00119	No DNN
Zhang L., He W., Martinez J	AutoTap: Synthesizing and Repairing Trigger-Action Program	2019	8811900	281	291	11	10.1109/ICSE.2019.00043	No DNN
Zhang J., Wang X., Zhang H	A Novel Neural Source Code Representation Based on Abstr	2019	8812062	783	794	12	10.1109/ICSE.2019.00086	DNN-based software
Pham H.V., Lutellier T., Qi	CRADLE: Cross-Backend Validation to Detect and Localize	2019	8812095	1027	1038	12	10.1109/ICSE.2019.00107	Engineering DNNs
Saini V., Farmahinifarahani	Towards Automating Precision Studies of Clone Detectors	2019	8811972	49	59	11	10.1109/ICSE.2019.00023	ML no DL
Malik R.S., Patra J., Pradel	NL2Type: Inferring JavaScript Function Types from Natural	2019	8811893	304	315	12	10.1109/ICSE.2019.00045	DNN-based software
Chowdhury S.A., Hindle A.,	GreenBundle: An Empirical Study on the Energy Impact of	2019	8811956	1107	1118	12	10.1109/ICSE.2019.00114	No DNN
Cabral G.G., Minku L.L., Sh	Class Imbalance Evolution and Verification Latency in Just-i	2019	8812072	666	676	11	10.1109/ICSE.2019.00076	No DNN
Sivaraman A., Zhang T., Va	Active Inductive Logic Programming for Code Search	2019	8812091	292	303	12	10.1109/ICSE.2019.00044	No DNN
Molina F., Degiovanni R., P	Training Binary Classifiers as Data Structure Invariants	2019	8811951	759	770	12	10.1109/ICSE.2019.00084	DNN-based software
Shakeri Hossein Abad Z., G	Supporting Analysts by Dynamic Extraction and Classificati	2019	8812084	442	453	12	10.1109/ICSE.2019.00057	No DNN
Chen Y., Su T., Su Z.	Deep Differential Testing of JVM Implementations	2019	8811957	1257	1268	12	10.1109/ICSE.2019.00127	No DNN
Fan M., Luo X., Liu J., Wan	Graph Embedding Based Familial Analysis of Android Malw	2019	8812083	771	782	12	10.1109/ICSE.2019.00085	No DNN
Rahman M., Palani D., Rigt	Natural Software Revisited	2019	8811940	37	48	12	10.1109/ICSE.2019.00022	No DNN
Kim J., Feldt R., Yoo S.	Guiding Deep Learning System Testing Using Surprise Ade	2019	8812069	1039	1049	11	10.1109/ICSE.2019.00108	Engineering DNNs
Lin B., Zampetti F., Bavota	Pattern-Based Mining of Opinions in Q&A Websites	2019	8811960	548	559	12	10.1109/ICSE.2019.00066	No DNN
Hata H., Treude C., Kula R.	9.6 Million Links in Source Code Comments: Purpose, Evol	2019	8811933	1211	1221	11	10.1109/ICSE.2019.00123	No DNN
Tufano M., Pantiuchina J.,	On Learning Meaningful Code Changes Via Neural Machine	2019	8811910	25	36	12	10.1109/ICSE.2019.00021	DNN-based software
Hao R., Feng Y., Jones J.A.	CTRAS: Crowdsourced Test Report Aggregation and Summ	2019	8811987	900	911	12	10.1109/ICSE.2019.00096	No DNN
Wang J., Chen B., Wei L., L	Superion: Grammar-Aware Greybox Fuzzing	2019	8811923	724	735	12	10.1109/ICSE.2019.00081	No DNN
Abid N.J., Sharif B., Dragan	Developer Reading Behavior while Summarizing Java Metho	2019	8812039	384	395	12	10.1109/ICSE.2019.00052	No DNN
Zhao Y., Yu T., Su T., Liu Y.	ReCDroid: Automatically Reproducing Android Application C	2019	8811942	128	139	12	10.1109/ICSE.2019.00030	No DNN
Zhu C., Legunsen O., Shi A.	A Framework for Checking Regression Test Selection Tools	2019	8812073	430	441	12	10.1109/ICSE.2019.00056	No DNN
Atlidakis V., Godefroid P.,	RESTler: Stateful REST API Fuzzing	2019	8811961	748	758	11	10.1109/ICSE.2019.00083	No DNN
Nguyen P.T., Di Rocco J., D	FOCUS: A Recommender System for Mining API Function C	2019	8812051	1050	1060	11	10.1109/ICSE.2019.00109	No DNN
Chen S., Fan L., Chen C., S	StoryDroid: Automated Generation of Storyboard for Androi	2019	8812043	596	607	12	10.1109/ICSE.2019.00070	No DNN
Liu K., Kim D., Bissyande T	Learning to Spot and Refactor Inconsistent Method Names	2019	8812134	1	12	12	10.1109/ICSE.2019.00019	DNN-based software

Results of SCOPUS search for ICSE 2020

Authors	Title	Year	Art. No.	Page start	Page end	Page count	DOI	Type
Zhang P., Wang J., Sun J.,	White-box fairness testing through adversarial sampling	2020	3380331	949	960	12	10.1145/3377811.3380331	Engineering DNNs
Garcia J., Feng Y., Shen J.	A comprehensive study of autonomous vehicle bugs	2020	3380397	385	396	12	10.1145/3377811.3380397	No DNN
Chen J., Hu K., Yu Y., Chen	Software visualization and deep transfer learning for effective sof	2020	3380389	578	589	12	10.1145/3377811.3380389	DNN-based software
Tabassum S., Minku L.L., F	An investigation of cross-project learning in online just-in-time s	2020	3380403	554	565	12	10.1145/3377811.3380403	No DNN
Krueger R., Huang Y., Liu X	Neurological divide: An fmri study of prose and codewriting	2020	3380348	678	690	13	10.1145/3377811.3380348	No DNN
Paulsen B., Wang J., Wang	Reludiff: Differential verification of deep neural networks	2020	3380337	714	726	13	10.1145/3377811.3380337	Engineering DNNs
Guo H., Singh M.P.	Caspar: Extracting and synthesizing user stories of problems fro	2020	3380924	628	640	13	10.1145/3377811.3380924	ML no DL
Mathew G., Parnin C., Stol	Slacc: Simion-based language agnostic code clones	2020	3380407	210	221	12	10.1145/3377811.3380407	No DNN
Aghajani E., Nagy C., Linar	Software documentation: The practitioners' perspective	2020	3380405	590	601	12	10.1145/3377811.3380405	No DNN
Bai Y., Xing Z., Li X., Feng	Unsuccessful story about few shot malware family classification	2020	3380354	1560	1571	12	10.1145/3377811.3380354	Engineering DNNs
Wu M., Ouyang Y., Zhou H.	Simulee: Detecting cuda synchronization bugs via memory-acce	2020	3380358	937	948	12	10.1145/3377811.3380358	No DNN
Johnson B., Brun Y., Melio	Causal testing: Understanding defects' root causes	2020	3380377	87	99	13	10.1145/3377811.3380377	No DNN
Zhang J., Wang X., Zhang I	Retrieval-based neural source code summarization	2020	3380383	1385	1397	13	10.1145/3377811.3380383	DNN-based software
Zhou W., Zhao Y., Zhang G	HARP: Holistic analysis for refactoring python-based analytics p	2020	3380434	506	517	12	10.1145/3377811.3380434	No DNN
Tao G., Ma S., Liu Y., Xu Q	Trader: Trace divergence analysis and embedding regulation for	2020	3380423	986	998	13	10.1145/3377811.3380423	Engineering DNNs
Ren X., Sun J., Xing Z., Xia	Demystify official api usage directives with crowdsourced api mi	2020	3380430	925	936	12	10.1145/3377811.3380430	No DNN
Stocco A., Weiss M., Calza	Misbehaviour prediction for autonomous driving systems	2020	3380353	359	371	13	10.1145/3377811.3380353	Engineering DNNs
Zhang R., Xiao W., Zhang H	An empirical study on program failures of deep learning jobs	2020	3380362	1159	1170	12	10.1145/3377811.3380362	Engineering DNNs
Chen L., Hassan F., Wang X	Taming behavioral backward incompatibilities via cross-project t	2020	3380436	112	124	13	10.1145/3377811.3380436	No DNN
Moran K., Palacio D.N., Be	Improving the effectiveness of traceability link recovery using hie	2020	3380418	873	885	13	10.1145/3377811.3380418	No DNN
Reddy S., Lemieux C., Padl	Quickly generating diverse valid test inputs with reinforcement le	2020	3380399	1410	1421	12	10.1145/3377811.3380399	No DNN
Brindescu C., Ahmed I., Le	Planning for untangling: Predicting the difficulty of merge conflic	2020	3380344	801	811	11	10.1145/3377811.3380344	No DNN
Hoang T., Kang H.J., Lo D.	Cc2vec: Distributed representations of code changes	2020	3380361	518	529	12	10.1145/3377811.3380361	DNN-based software
Shi L., Xing M., Li M., Wang	Detection of hidden feature requests from massive chat messag	2020	3380356	641	653	13	10.1145/3377811.3380356	DNN-based software
Islam M.J., Pan R., Nguyen	Repairing deep neural networks: Fix patterns and challenges	2020	3380378	1135	1146	12	10.1145/3377811.3380378	Engineering DNNs
Zhai J., Xu X., Shi Y., Tao C	CPC: Automatically classifying and propagating natural language	2020	3380427	1359	1371	13	10.1145/3377811.3380427	ML no DL
Manes V.J.M., Kim S., Cha	Ankou: Guiding grey-box fuzzing towards combinatorial differer	2020	3380421	1024	1036	13	10.1145/3377811.3380421	No DNN
Watson C., Tufano M., Mor	On learning meaningful assert statements for unit test cases	2020	3380429	1398	1409	12	10.1145/3377811.3380429	DNN-based software
Chen D., Jiang Y., Xu C., M	Testing file system implementations on layered models	2020	3380350	1483	1495	13	10.1145/3377811.3380350	No DNN
Gao X., Saha R.K., Prasad	Fuzz testing based data augmentation to improve robustness o	2020	3380415	1147	1158	12	10.1145/3377811.3380415	Engineering DNNs
Xia H., Zhang Y., Zhou Y., C	How android developers handle evolution-induced api compatib	2020	3380357	886	898	13	10.1145/3377811.3380357	No DNN
Wang H., Xu J., Xu C., Ma X	Dissector: Input validation for deep learning applications by cros	2020	3380379	727	738	12	10.1145/3377811.3380379	Engineering DNNs
Guo S., Chen Y., Li P., Che	SpecuSym: Speculative symbolic execution for cache timing lea	2020	3380428	1235	1247	13	10.1145/3377811.3380428	No DNN
Brennan T., Saha S., Bultar	JVM Fuzzing for jit-induced side-channel detection	2020	3380432	1011	1023	13	10.1145/3377811.3380432	No DNN
Karampatsis R.M., Babii H.	Big code != big vocabulary: Open-vocabulary models for source	2020	3380342	1073	1085	13	10.1145/3377811.3380342	Engineering DNNs
He P., Meister C., Su Z.	Structure-invariant testing for machine translation	2020	3380339	961	973	13	10.1145/3377811.3380339	Engineering DNNs
Yi L., Wang S., Nguyen T.N.	Difix: Context-based code transformation learning for automated	2020	3380345	602	614	13	10.1145/3377811.3380345	DNN-based software
Chowdhury S.A., Shrestha	Slemi: Equivalence modulo input (emi) based mutation of cps m	2020	3380381	335	346	12	10.1145/3377811.3380381	No DNN
Girardi D., Novielli N., Fucc	Recognizing developers' emotions while programming	2020	3380374	666	677	12	10.1145/3377811.3380374	ML no DL
Humbatova N., Jahangirov	Taxonomy of real faults in deep learning systems	2020	3380395	1110	1121	12	10.1145/3377811.3380395	Engineering DNNs
Sun Z., Zhang J.M., Harmar	Automatic testing and improvement of machine translation	2020	3380420	974	985	12	10.1145/3377811.3380420	Engineering DNNs
Menghi C., Nejati S., Brian	Approximation-refinement testing of compute-intensive cyber-p	2020	3380370	372	384	13	10.1145/3377811.3380370	No DNN
Zhou H., Li W., Kong Z., Gu	Deepbillboard: Systematic physical-world testing of autonomou	2020	3380422	347	358	12	10.1145/3377811.3380422	Engineering DNNs
Cardenas C.B., Cooper N.	Translating video recordings of mobile app usages into replayab	2020	3380328	309	321	13	10.1145/3377811.3380328	No DNN
Alenazi M., Niu N., Savolair	A novel approach to tracing safety requirements and state-based	2020	3380332	848	860	13	10.1145/3377811.3380332	No DNN

Results of SCOPUS search for ICSE 2020

Authors	Title	Year	Art. No.	Page start	Page end	Page count	DOI	Type
Shrestha N., Botta C., Bari	Herewe go again: Why is it difficult for developers to learn another	2020	3380352	691	701	11	10.1145/3377811.3380352	No DNN
Zhang X., Xie X., Ma L., Du	Towards characterizing adversarial defects of deep learning softw	2020	3380368	739	751	13	10.1145/3377811.3380368	Engineering DNNs
Yandrapally R., Stocco A.,	Near-duplicate detection inweb app model inference	2020	3380416	186	197	12	10.1145/3377811.3380416	No DNN
Liu K., Wang S., Koyuncu A	On the efficiency of test suite based program repair a systematic	2020	3380338	615	627	13	10.1145/3377811.3380338	No DNN
Noller Y., Pasareanu C.S., I	Hydiff: Hybrid differential software analysis	2020	3380363	1273	1285	13	10.1145/3377811.3380363	Engineering DNNs
Rahman A., Farhana E., Pa	Gang of eight: A defect taxonomy for infrastructure as code scri	2020	3380409	752	764	13	10.1145/3377811.3380409	No DNN
Dong Z., Bohme M., Cojoca	Time-travel testing of android apps	2020	3380402	481	492	12	10.1145/3377811.3380402	No DNN
Sui L., Dietrich J., Tahir A.	On the recall of static call graph construction in practice	2020	3380441	1049	1060	12	10.1145/3377811.3380441	No DNN
Chen J., Chen C., Xing Z., X	Unblind your apps: Predicting natural-language labels for mobile	2020	3380327	322	334	13	10.1145/3377811.3380327	DNN-based software
Zhao D., Xing Z., Chen C., X	Seenomaly: Vision-based linting of gui animation effects against	2020	3380411	1286	1297	12	10.1145/3377811.3380411	No DNN
Li K., Xiang Z., Chen T., Wa	Understanding the automated parameter optimization on transfe	2020	3380360	566	577	12	10.1145/3377811.3380360	No DNN

Results of SCOPUS search for ICSE 2021

Authors	Title	Year	Page start	Page end	Page count	DOI	
Zhao Z., Jiang Y., Xu C.	Synthesizing object state transformers for	2021	1111	1122	12	10.1109/ICSE43902.2021.00103	No DNN
Dola S., Dwyer M.B., So	Distribution-aware testing of neural networ	2021	226	237	12	10.1109/ICSE43902.2021.00032	Engineering DNNs
Kucuk Y., Henderson T.	Improving fault localization by integrating v	2021	649	660	12	10.1109/ICSE43902.2021.00066	No DNN
Fan Y., Xia X., Lo D., H	A differential testing approach for evaluatin	2021	1174	1185	12	10.1109/ICSE43902.2021.00108	No DNN
Xu X., Zheng Q., Yan Z.	Interpretation-enabled software reuse dete	2021	873	884	12	10.1109/ICSE43902.2021.00084	No DNN
Alhamed M., Storer T.	Playing planning poker in crowds: Human	2021	1	12	12	10.1109/ICSE43902.2021.00014	No DNN
Zhao T., Chen C., Liu Y.	GUIGAN: Learning to generate GUI design	2021	748	760	13	10.1109/ICSE43902.2021.00074	DNN-based software
Ma W., Titchew Chekan	MuDelta: Delta-oriented mutation testing a	2021	897	909	13	10.1109/ICSE43902.2021.00086	No DNN
Gao Y., Zhu Y., Zhang H	Resource-guided configuration space redu	2021	175	187	13	10.1109/ICSE43902.2021.00028	Engineering DNNs
Makhshari A., Mesbah	IoT bugs and development challenges	2021	460	472	13	10.1109/ICSE43902.2021.00051	No DNN
Xiao Y., Beschastnikh	Self-checking deep neural networks in dep	2021	372	384	13	10.1109/ICSE43902.2021.00044	Engineering DNNs
Cooper N., Bernal-Card	It takes two to tango: Combining visual an	2021	957	969	13	10.1109/ICSE43902.2021.00091	No DNN
Li Y., Wang S., Nguyen	A context-based automated approach for r	2021	574	586	13	10.1109/ICSE43902.2021.00060	DNN-based software
He P., Meister C., Su Z.	Testing machine translation via referential t	2021	410	422	13	10.1109/ICSE43902.2021.00047	Engineering DNNs
Shriver D., Elbaum S., D	Reducing DNN properties to enable falsific	2021	275	287	13	10.1109/ICSE43902.2021.00036	Engineering DNNs
Rosa G., Pascarella L.,	Evaluating SZZ implementations through a	2021	436	447	12	10.1109/ICSE43902.2021.00049	No DNN
Tufano R., Pascarella L	Towards automating code review activities	2021	163	174	12	10.1109/ICSE43902.2021.00027	DNN-based software
Gopinath R., Nemati H.	Input algebras	2021	699	710	12	10.1109/ICSE43902.2021.00070	No DNN
Sotiropoulos T., Chalias	Data-oriented differential testing of object-r	2021	1535	1547	13	10.1109/ICSE43902.2021.00137	No DNN
Li Y., Wang S., Nguyen	Fault localization with code coverage repre	2021	661	673	13	10.1109/ICSE43902.2021.00067	DNN-based software
Endres M., Karas Z., Hu	Relating reading, visualization, and coding	2021	600	612	13	10.1109/ICSE43902.2021.00062	No DNN
Meng L., Li Y., Chen L.,	Measuring discrimination to boost compar	2021	385	396	12	10.1109/ICSE43902.2021.00045	Engineering DNNs
Vikram V., Padhye R., S	Growing a test corpus with bonsai fuzzing	2021	723	735	13	10.1109/ICSE43902.2021.00072	No DNN
Wen F., Aghajani E., Na	Siri, write the next method	2021	138	149	12	10.1109/ICSE43902.2021.00025	No DNN
Wang S., Shrestha N., S	Automatic unit test generation for machine	2021	1548	1560	13	10.1109/ICSE43902.2021.00138	Engineering DNNs
Li Y., Li S., Xu Z., Cao J	TransRegex: Multi-modal regular expressio	2021	1210	1222	13	10.1109/ICSE43902.2021.00111	DNN-based software
Wang J., Chen J., Sun Y	RobOT: Robustness-oriented testing for d	2021	300	311	12	10.1109/ICSE43902.2021.00038	Engineering DNNs
Luo C., Lin J., Cai S., C	AutoCCAG: An automated approach to co	2021	201	212	12	10.1109/ICSE43902.2021.00030	No DNN
Zhang X., Zhai J., Ma S	AUTOTRAINER: An automatic DNN trainin	2021	359	371	13	10.1109/ICSE43902.2021.00043	Engineering DNNs
Yu S., Fang C., Yun Y.,	Layout and image recognition driving cros	2021	1561	1571	11	10.1109/ICSE43902.2021.00139	No DNN
Jiang Y., Liu H., Niu N.,	Extracting concise bug-fixing patches from	2021	686	698	13	10.1109/ICSE43902.2021.00069	No DNN
Pan R., Le V., Nagappa	Can program synthesis be used to learn m	2021	785	796	12	10.1109/ICSE43902.2021.00077	No DNN
Hu Y., Wang H., Ji T., X	CHAMP: Characterizing undesired app beh	2021	933	945	13	10.1109/ICSE43902.2021.00089	No DNN
Chen L., Ouyang Y., Zh	Fast and precise on-the-fly patch validation	2021	1123	1134	12	10.1109/ICSE43902.2021.00104	No DNN
Haering M., Stanik C., F	Automatically matching bug reports with re	2021	970	981	12	10.1109/ICSE43902.2021.00092	DNN-based software
Wu H., Deng W., Niu X.,	Identifying key features from app user revie	2021	922	932	11	10.1109/ICSE43902.2021.00088	No DNN
Ezzini S., Abualhaija S.,	Using domain-specific corpora for improve	2021	1485	1497	13	10.1109/ICSE43902.2021.00133	No DNN
Yu S., Fang C., Cao Z.,	Prioritize crowdsourced test reports via dee	2021	946	956	11	10.1109/ICSE43902.2021.00090	DNN-based software
Wang Y., Li G., Wang Z.	Fast outage analysis of large-scale produc	2021	885	896	12	10.1109/ICSE43902.2021.00085	No DNN
Mastropaolo A., Scalab	Studying the usage of text-to-text transfer	2021	336	347	12	10.1109/ICSE43902.2021.00041	DNN-based software
Zhang J.M., Harman M.	'Ignorance and Prejudice' in software fairm	2021	1436	1447	12	10.1109/ICSE43902.2021.00129	No DNN

Results of SCOPUS search for ICSE 2021

Authors	Title	Year	Page start	Page end	Page count	DOI	
Wardat M., Le W., Raja	DeepLocalize: Fault localization for deep n	2021	251	262	12	10.1109/ICSE43902.2021.00034	Engineering DNNs
Zheng Y., Liu Y., Xie X.	Automatic web testing using curiosity-drive	2021	423	435	13	10.1109/ICSE43902.2021.00048	No DNN
Tang Y., Khatchadouria	An empirical study of refactorings and tech	2021	238	250	13	10.1109/ICSE43902.2021.00033	Engineering DNNs
Li Y., Hua J., Wang H.,	DeepPayload: Black-box backdoor attack o	2021	263	274	12	10.1109/ICSE43902.2021.00035	Engineering DNNs
Li Z., Li H., Chen T.-H.P	DeepLV: Suggesting log levels using ordin	2021	1461	1472	12	10.1109/ICSE43902.2021.00131	DNN-based software
Chen J., Xu N., Chen P.	Efficient compiler autotuning via bayesian	2021	1198	1209	12	10.1109/ICSE43902.2021.00110	No DNN
Luo W., Chai D., Ruan X	Graph-based fuzz testing for deep learning	2021	288	299	12	10.1109/ICSE43902.2021.00037	Engineering DNNs
Wang Z., You H., Chen	Prioritizing test inputs for deep neural netw	2021	397	409	13	10.1109/ICSE43902.2021.00046	No DNN
Jiang N., Lutellier T., T	CURE: Code-aware neural machine transla	2021	1161	1173	13	10.1109/ICSE43902.2021.00107	DNN-based software
Cao K., Chen C., Baltes	Automated query reformulation for efficien	2021	1273	1285	13	10.1109/ICSE43902.2021.00116	DNN-based software
Guizzo G., Petke J., Sa	Enhancing genetic improvement of softwa	2021	1323	1333	11	10.1109/ICSE43902.2021.00120	No DNN
Chatterjee A., Guizani	AID: An automated detector for gender-inc	2021	1423	1435	13	10.1109/ICSE43902.2021.00128	No DNN
Bui N.D.Q., Yu Y., Jiang	InferCode: Self-supervised learning of cod	2021	1186	1197	12	10.1109/ICSE43902.2021.00109	DNN-based software
Wang J., Sung C., Ragh	Data-driven synthesis of provably sound s	2021	810	822	13	10.1109/ICSE43902.2021.00079	No DNN
Wang H., Xia X., Lo D.,	Automatic solution summarization for cras	2021	1286	1297	12	10.1109/ICSE43902.2021.00117	No DNN
Shrikanth N.C., Majum	Early life cycle software defect prediction. V	2021	448	459	12	10.1109/ICSE43902.2021.00050	No DNN
Chatterjee P., Damevsk	Automatic extraction of opinion-based Q&	2021	1260	1272	13	10.1109/ICSE43902.2021.00115	DNN-based software
Wainakh Y., Rauf M., P	IdBench: Evaluating semantic representati	2021	562	573	12	10.1109/ICSE43902.2021.00059	Engineering DNNs
Kim S., Zhao J., Tian Y.	Code prediction by feeding trees to transfo	2021	150	162	13	10.1109/ICSE43902.2021.00026	DNN-based software
Guerriero A., Pietrantu	Operation is the hardest teacher: Estimatin	2021	348	358	11	10.1109/ICSE43902.2021.00042	Engineering DNNs
Lin J., Liu Y., Zeng Q.,	Traceability transformed: Generating more	2021	324	335	12	10.1109/ICSE43902.2021.00040	DNN-based software
Velez M., Jamshidi P., S	White-box analysis over machine learning:	2021	1072	1084	13	10.1109/ICSE43902.2021.00100	No DNN
Yang B., Xing Z., Xia X.	Don't do that! Hunting down visual design	2021	761	772	12	10.1109/ICSE43902.2021.00075	No DNN
Chen Z., Yao H., Lou Y.	An empirical study on deployment faults o	2021	674	685	12	10.1109/ICSE43902.2021.00068	Engineering DNNs

Results of SCOPUS search for ESEC/FSE 2018

Authors	Title	Year	Art. No.	Page start	Page end	Page count	DOI	Type
Basios M., Li	Darwinian data structure select	2018		118	128	11	10.1145/3236024.3236043	No DNN
Gao Y., Dou	An empirical study on crash re	2018		539	550	12	10.1145/3236024.3236030	No DNN
Dash S.K., Al	RefiNym: Using names to refin	2018		107	117	11	10.1145/3236024.3236042	No DNN
Zhao G., Hua	DeepSim: Deep learning code f	2018		141	151	11	10.1145/3236024.3236068	DNN-based software
Henkel J., La	Code vectors: Understanding p	2018		163	174	12	10.1145/3236024.3236085	No DNN
Rahman M.M	Improving IR-based bug locali	2018		621	632	12	10.1145/3236024.3236065	No DNN
Ma S., Liu Y.	MODE: Automated neural netw	2018		175	186	12	10.1145/3236024.3236082	Engineering DNNs
Fedorova A.,	Performance comprehension a	2018		83	94	12	10.1145/3236024.3236081	No DNN
Chen D., Fu	Applications of psychological s	2018		456	467	12	10.1145/3236024.3236050	No DNN
Hashimoto M	Automated patch extraction via	2018		598	609	12	10.1145/3236024.3236047	No DNN
Lu J., Li F., L	CloudRaid: Hunting concurren	2018		3	14	12	10.1145/3236024.3236071	No DNN
Tu F., Zhu J.,	Be careful of when: An empiric	2018		307	318	12	10.1145/3236024.3236054	No DNN
Zhao J., Alba	Neural-augmented static analys	2018		342	353	12	10.1145/3236024.3236066	DNN-based software
Roy S., Pand	Bug synthesis: Challenging bu	2018		224	234	11	10.1145/3236024.3236084	No DNN
Dutta S., Leg	Testing probabilistic programr	2018		574	586	13	10.1145/3236024.3236057	No DNN
Hu G., Zhu L.	AppFlow: Using machine learn	2018		269	282	14	10.1145/3236024.3236055	ML no DL
Nguyen T., Ti	Complementing global and loc	2018		551	562	12	10.1145/3236024.3236036	DNN-based software
Hellendoorn	Deep learning type inference	2018		152	162	11	10.1145/3236024.3236051	DNN-based software
Song L., Mini	A novel automated approach fo	2018		468	479	12	10.1145/3236024.3236052	No DNN
Lin Q., Hsieh	Predicting node failure in cloud	2018		480	490	11	10.1145/3236024.3236060	ML no DL
Kate S., Ore	Phys: Probabilistic physical uni	2018		563	573	11	10.1145/3236024.3236035	No DNN
Saini V., Farr	Oreo: Detection of clones in th	2018		354	365	12	10.1145/3236024.3236026	ML no DL
Jamshidi P.,	Learning to sample: Exploiting	2018		71	82	12	10.1145/3236024.3236074	No DNN
DeFreez D.,	Path-based function embeddir	2018		423	433	11	10.1145/3236024.3236059	ML no DL

Results of SCOPUS search for ESEC/FSE 2019

Authors	Title	Year	Art. No.	Page start	Page end	Page count	DOI	Type
Hirao T., McIntosh S.,	The review linkage graph for code review analytics: A recover	2019		578	589	12	10.1145/3338906.3338949	No DNN
Nie P., Rai R., Li J.J.,	A framework for writing trigger-action todo comments in exe	2019		385	396	12	10.1145/3338906.3338965	No DNN
Chen Y., Martins R., F	Maximal multi-layer specification synthesis	2019		602	612	11	10.1145/3338906.3338951	DNN-based software
Aggarwal A., Lohia P.	Black box fairness testing of machine learning models	2019		625	635	11	10.1145/3338906.3338937	Engineering DNNs
Gambi A., Huynh T., F	Generating effective test cases for self-driving cars from polic	2019		257	267	11	10.1145/3338906.3338942	Engineering DNNs
Bavishi R., Yoshida H	Phoenix: Automated data-driven synthesis of repairs for static	2019		613	624	12	10.1145/3338906.3338952	No DNN
Safwan K.A., Servant	Decomposing the rationale of code commits: The software d	2019		397	408	12	10.1145/3338906.3338979	No DNN
Wang C., Peng X., Liu	A learning-based approach for automatic construction of dor	2019		97	108	12	10.1145/3338906.3338963	No DNN
Durieux T., Madeiral F	Empirical review of Java program repair tools: A large-scale ex	2019		302	313	12	10.1145/3338906.3338911	No DNN
Najafi A., Rigby P.C.,	Bisecting commits and modeling commit risk during testing	2019		279	289	11	10.1145/3338906.3338944	No DNN
Winter J., Aniche M.,	Monitoring-aware IDEs	2019		420	431	12	10.1145/3338906.3338926	No DNN
Pauck F., Wehrheim F	Together strong: Cooperative Android app analysis	2019		374	384	11	10.1145/3338906.3338915	No DNN
Cotroneo D., De Simo	How bad can a bug get? An empirical analysis of software fa	2019		200	211	12	10.1145/3338906.3338916	No DNN
Wu Z., Johnson E., Ya	REINAM: Reinforcement learning for input-grammar inference	2019		488	498	11	10.1145/3338906.3338958	No DNN
Wen M., Wu R., Liu Y.	Exploring and exploiting the correlations between bug-induci	2019		326	337	12	10.1145/3338906.3338962	No DNN
Fucci D., Mollaalizade	On using machine learning to identify knowledge in API refer	2019		109	119	11	10.1145/3338906.3338943	DNN-based software
Zhang H., Huang X., Z	Ethnographic research in software engineering: A critical revie	2019		659	670	12	10.1145/3338906.3338976	No DNN
Zhang C., Su T., Yan Y	Finding and understanding bugs in software model checkers	2019		763	773	11	10.1145/3338906.3338932	No DNN
Chaparro O., Bernal-C	Assessing the quality of the steps to reproduce in bug report	2019		86	96	11	10.1145/3338906.3338947	ML no DL
Li Z., Ma X., Xu C., Ca	Boosting operational DNN testing efficiency through conditio	2019		499	509	11	10.1145/3338906.3338930	Engineering DNNs
Zhang X., Xu Y., Lin C	Robust log-based anomaly detection on unstable log data	2019		807	817	11	10.1145/3338906.3338931	DNN-based software
Kapus T., Cadar C.	A segmented memory model for symbolic execution	2019		774	784	11	10.1145/3338906.3338936	No DNN
Islam M.J., Nguyen G	A comprehensive study on deep learning bug characteristics	2019		510	520	11	10.1145/3338906.3338955	Engineering DNNs
Jia Z., Li S., Yu T., Lia	Automatically detecting missing cleanup for ungraceful exits	2019		751	762	12	10.1145/3338906.3338938	No DNN
Cha S., Oh H.	Concolic testing with adaptively changing search heuristics	2019		235	245	11	10.1145/3338906.3338964	No DNN
Liu M., Peng X., Marc	Generating query-specific class API summaries	2019		120	130	11	10.1145/3338906.3338971	ML no DL
Chen Z., Cao Y., Lu X	SEntiMoj: An emoji-powered learning approach for sentimen	2019		841	852	12	10.1145/3338906.3338977	DNN-based software
Dutta S., Zhang W., H	Storm: Program reduction for testing and debugging probab	2019		729	739	11	10.1145/3338906.3338972	No DNN
Zhou X., Peng X., Xie	Latent error prediction and fault localization for microservice e	2019		683	694	12	10.1145/3338906.3338961	ML no DL
Bui N.D.Q., Yu Y., Jia	SAR: Learning cross-language API mappings with little know	2019		796	806	11	10.1145/3338906.3338924	ML no DL
Du X., Xie X., Li Y., M	DeepStellar: Model-based quantitative analysis of stateful dee	2019		477	487	11	10.1145/3338906.3338954	Engineering DNNs
Chen J., Han J., Sun F	Compiler bug isolation via effective witness test program gen	2019		223	234	12	10.1145/3338906.3338957	No DNN
Koyuncu A., Liu K., Bi	IFixR: Bug report driven program repair	2019		314	325	12	10.1145/3338906.3338935	No DNN

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She D., Krishna R.,	MTFuzz: Fuzzing with a multi-task neural network	2020		737	749	13	10.1145/3368089.3409723	DNN-based software
Mahajan S., Abolha	Recommending stack overflow posts for fixing runtime e	2020		1052	1064	13	10.1145/3368089.3409764	No DNN
Yan S., Tao G., Liu	Correlations between deep neural network model covera	2020		775	787	13	10.1145/3368089.3409671	Engineering DNNs
Lou Y., Chen Z., Ca	Understanding build issue resolution in practice: Sympto	2020		617	628	12	10.1145/3368089.3409760	No DNN
Xie W., Peng X., Li	API method recommendation via explicit matching of fur	2020		1015	1026	12	10.1145/3368089.3409731	No DNN
Handa S., Rinard M	Inductive program synthesis over noisy data	2020		87	98	12	10.1145/3368089.3409732	No DNN
Harel-Canada F., V	Is neuron coverage a meaningful measure for testing dee	2020		851	862	12	10.1145/3368089.3409754	Engineering DNNs
Zhang Y., Ren L., C	Detecting numerical bugs in neural network architectures	2020		826	837	12	10.1145/3368089.3409720	Engineering DNNs
Chen S., Bateni S.,	DENAS: Automated rule generation by knowledge extrac	2020		813	825	13	10.1145/3368089.3409733	No DNN
Zhang M., Meng W	Detecting and understanding JavaScript global identifier	2020		38	49	12	10.1145/3368089.3409747	No DNN
Zhao N., Chen J., V	Real-time incident prediction for online service systems	2020		315	326	12	10.1145/3368089.3409672	No DNN
Huijgens H., Rasto	Questions for data scientists in software engineering: A r	2020		568	579	12	10.1145/3368089.3409717	No DNN
Cha S., Oh H.	Making symbolic execution promising by learning aggres	2020		147	158	12	10.1145/3368089.3409755	No DNN
Chen Y., Yang X., I	Identifying linked incidents in large-scale online service s	2020		304	314	11	10.1145/3368089.3409768	DNN-based software
Chen Z., Cao Y., Li	A comprehensive study on challenges in deploying deep	2020		750	762	13	10.1145/3368089.3409759	Engineering DNNs
Jabbarvand R., Me	Automated construction of energy test oracles for Androi	2020		927	938	12	10.1145/3368089.3409677	DNN-based software
Biswas S., Rajan H	Do the machine learning models on a crowd sourced pla	2020		642	653	12	10.1145/3368089.3409704	No DNN
Nan Z., Guan H., Si	HISyn: Human learning-inspired natural language progra	2020		75	86	12	10.1145/3368089.3409673	No DNN
Tang Y., Sui Y., Wa	All your app links are belong to us: Understanding the th	2020		914	926	13	10.1145/3368089.3409702	No DNN
Ketkar A., Tsantali	Understanding type changes in Java	2020		629	641	13	10.1145/3368089.3409725	No DNN
Zhai J., Shi Y., Par	C2S: Translating natural language comments to formal p	2020		25	37	13	10.1145/3368089.3409716	No DNN
Zhao Y., Xiao L., B	Automatically identifying performance issue reports with	2020		964	975	12	10.1145/3368089.3409674	ML no DL
Pradel M., Gousios	TypeWriter: Neural type prediction with search-based vali	2020		209	220	12	10.1145/3368089.3409715	DNN-based software
Chakraborty J., Ma	Fairway: A way to build fair ML software	2020		654	665	12	10.1145/3368089.3409697	Engineering DNNs
Song S., Song C., J	CrFuzz: Fuzzing multi-purpose programs through input	2020		690	700	11	10.1145/3368089.3409769	No DNN
Zhang F., Chowdh	DeepSearch: A simple and effective blackbox attack for d	2020		800	812	13	10.1145/3368089.3409750	Engineering DNNs
Pan R., Rajan H.	On decomposing a deep neural network into modules	2020		889	900	12	10.1145/3368089.3409668	Engineering DNNs
Baranov E., Legay	Baital: An adaptive weighted sampling approach for impr	2020		1114	1126	13	10.1145/3368089.3409744	No DNN
Li Z., Ma X., Xu C.,	Operational calibration: Debugging confidence errors for	2020		901	913	13	10.1145/3368089.3409696	Engineering DNNs
Wang Z., Yan M., C	Deep learning library testing via effective model generatio	2020		788	799	12	10.1145/3368089.3409761	Engineering DNNs
Lee J., Nie P., Li J	On the naturalness of hardware descriptions	2020		530	542	13	10.1145/3368089.3409692	DNN-based software
Zhang Z., Li Y., Gu	Dynamic slicing for deep neural networks	2020		838	850	13	10.1145/3368089.3409676	Engineering DNNs
Huang Y., Leach K	Biases and differences in code review using medical ima	2020		456	468	13	10.1145/3368089.3409681	No DNN
Xu R., He F., Wang	Interval counterexamples for loop invariant learning	2020		111	122	12	10.1145/3368089.3409752	No DNN
Gupta S., He P., M	Machine translation testing via pathological invariance	2020		863	875	13	10.1145/3368089.3409756	Engineering DNNs
Ghamizi S., Cordy	Search-based adversarial testing and improvement of col	2020		1089	1100	12	10.1145/3368089.3409739	Engineering DNNs
Cambronero J.P., (AMS: Generating AutoML search spaces from weak spec	2020		763	774	12	10.1145/3368089.3409700	Engineering DNNs
Uesbeck P.M., Pet	A randomized controlled trial on the effects of embeddec	2020		410	420	11	10.1145/3368089.3409701	No DNN
Cummaudo A., Bar	Beware the evolving 'intelligent' web service! an integrati	2020		269	280	12	10.1145/3368089.3409688	No DNN
Chen J., Xie M., Xi	Object detection for graphical user interface: Old fashion	2020		1202	1214	13	10.1145/3368089.3409691	DNN-based software
Böhme M., Manès	Boosting fuzzer efficiency: An information theoretic pers	2020		678	689	12	10.1145/3368089.3409748	No DNN
Riccio V., Tonella I	Model-based exploration of the frontier of behaviours for	2020		876	888	13	10.1145/3368089.3409730	Engineering DNNs
Gopinath R., Math	Mining input grammars from dynamic control flow	2020		172	183	12	10.1145/3368089.3409679	No DNN

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Chen S., Jin S., Xie X.	Validation on machine reading comprehension software without annotated labels: A p	2021	590	602	13	10.1145/3468264.3468566	Engineering DNNs
Roy D., Fakhoury S., Arnaoudova V.	Reassessing automatic evaluation metrics for code summarization tasks	2021	1105	1116	12	10.1145/3468264.3468586	No DNN
Maltbie N., Niu N., Van Doren M., John	XAI tools in the public sector: A case study on predicting combined sewer overflows	2021	1032	1044	13	10.1145/3468264.3468547	Engineering DNNs
Shen Q., Ma H., Chen J., Tian Y., Cheu	A comprehensive study of deep learning compiler bugs	2021	968	980	13	10.1145/3468264.3468591	Engineering DNNs
Tao Y., Chen Z., Liu Y., Xuan J., Xu Z.,	Demystifying "bad" Error Messages in Data Science Libraries	2021	818	829	12	10.1145/3468264.3468566	No DNN
Van Der Leij D., Binda J., Van Dalen R.,	Data-driven extract method recommendations: A study at ING	2021	1337	1347	11	10.1145/3468264.3473927	No DNN
Chen T., Li M.	Multi-objectivizing software configuration tuning	2021	453	465	13	10.1145/3468264.3468555	No DNN
Biswas S., Rajan H.	Fair preprocessing: Towards understanding compositional fairness of data transforme	2021	981	993	13	10.1145/3468264.3468536	No DNN
Endres M., Fansher M., Shah P., Weime	To read or to rotate? comparing the effects of technical reading training and spatial sk	2021	754	766	13	10.1145/3468264.3468583	No DNN
Chen Y., Poskitt C.M., Sun J.	Code integrity attestation for PLCs using black box neural network predictions	2021	32	44	13	10.1145/3468264.3468617	DNN-based software
Luo Y., Filieri A., Zhou Y.	Symbolic parallel adaptive importance sampling for probabilistic program analysis	2021	1166	1177	12	10.1145/3468264.3468593	No DNN
Pei K., Guan J., Broughton M., Chen Z.	StateFormer: Fine-grained type recovery from binaries using generative state modeling	2021	690	702	13	10.1145/3468264.3468607	DNN-based software
Zhao N., Chen J., Yu Z., Wang H., Li J.,	Identifying bad software changes via multimodal anomaly detection for online service	2021	527	539	13	10.1145/3468264.3468543	DNN-based software
Ma Y., Liu S., Jiang J., Chen G., Li K.	A comprehensive study on learning-based PE malware family classification methods	2021	1314	1325	12	10.1145/3468264.3473925	DNN-based software
Yao P., Huang H., Tang W., Shi Q., Wu	Skeletal approximation enumeration for SMT solver testing	2021	1141	1153	13	10.1145/3468264.3468546	No DNN
Wang B., Baluta T., Kolluri A., Saxena	SynGaur: Guaranteeing generalization in programming by example	2021	677	689	13	10.1145/3468264.3468621	No DNN
Wen J., Chen Z., Liu Y., Lou Y., Ma Y.,	An empirical study on challenges of application development in serverless computing	2021	416	428	13	10.1145/3468264.3468558	No DNN
Mathew G., Stolee K.T.	Cross-language code search using static and dynamic analyses	2021	205	217	13	10.1145/3468264.3468538	No DNN
Ye J., Chen K., Xie X., Ma L., Huang R.	An empirical study of GUI widget detection for industrial mobile games	2021	1427	1437	11	10.1145/3468264.3473935	DNN-based software
Ren M., Ma F., Yin Z., Fu Y., Li H., Char	Making smart contract development more secure and easier	2021	1360	1370	11	10.1145/3468264.3473925	DNN-based software
Zhang X., Xu Y., Qin S., He S., Qiao B.	Onion: Identifying incident-indicating logs for cloud systems	2021	1253	1263	11	10.1145/3468264.3473915	No DNN
Lin Y., Ong Y.S., Sun J., Fraser G., Don	Graph-based seed object synthesis for search-based unit testing	2021	1068	1080	13	10.1145/3468264.3468616	No DNN
Zhao N., Wang H., Li Z., Peng X., Wang	An empirical investigation of practical log anomaly detection for online service systems	2021	1404	1415	12	10.1145/3468264.3473933	DNN-based software
Wang G., Shen R., Chen J., Xiong Y., Zi	Probabilistic Delta debugging	2021	881	892	12	10.1145/3468264.3468625	No DNN
Yin L., Chen Z., Xuan Q., Filkov V.	Sustainability forecasting for Apache incubator projects	2021	1056	1067	12	10.1145/3468264.3468563	ML no DL
Mansur M.N., Christakis M., Wüstholtz V	Metamorphic testing of Datalog engines	2021	639	650	12	10.1145/3468264.3468573	No DNN
Luo L., Schäf M., Sanchez D., Bodden E	IDE support for cloud-based static analyses	2021	1178	1189	12	10.1145/3468264.3468535	No DNN
Cito J., Dillig I., Kim S., Murali V., Chan	Explaining mispredictions of machine learning models using rule induction	2021	716	727	12	10.1145/3468264.3468614	Engineering DNNs
Wang W., Yang W., Xu T., Xie T.	Vet: Identifying and avoiding UI exploration tar pits	2021	83	94	12	10.1145/3468264.3468554	No DNN
Chen K., Li Y., Chen Y., Fan C., Hu Z., Y	GLIB: Towards automated test oracle for graphically-rich applications	2021	1093	1104	12	10.1145/3468264.3468586	Engineering DNNs
Lampel J., Just S., Apel S., Zeller A.	When life gives you oranges: Detecting and diagnosing intermittent job failures at Moz	2021	1381	1392	12	10.1145/3468264.3473937	No DNN
Liu J., Baltes S., Treude C., Lo D., Zhar	Characterizing search activities on stack overflow	2021	919	931	13	10.1145/3468264.3468582	No DNN
Chiou P.T., Alotaibi A.S., Halfond W.G.,	Detecting and localizing keyboard accessibility failures in web applications	2021	855	867	13	10.1145/3468264.3468581	No DNN
Shen B., Zhang W., Kästner C., Zhao H.	SmartCommit: A graph-based interactive assistant for activity-oriented commits	2021	379	390	12	10.1145/3468264.3468555	No DNN
Su T., Wang J., Su Z.	Benchmarking automated GUI testing for Android against real-world bugs	2021	119	130	12	10.1145/3468264.3468626	No DNN
Lou Y., Zhu Q., Dong J., Li X., Sun Z., H	Boosting coverage-based fault localization via graph-based representation learning	2021	664	676	13	10.1145/3468264.3468586	DNN-based software
Zhu Q., Sun Z., Xiao Y.-A., Zhang W., Y	A syntax-guided edit decoder for neural program repair	2021	341	353	13	10.1145/3468264.3468544	DNN-based software
Song D., Lee W., Oh H.	Context-aware and data-driven feedback generation for programming assignments	2021	328	340	13	10.1145/3468264.3468598	No DNN
Karas Z., Jahn A., Weimer W., Huang Y	Connecting the dots: Rethinking the relationship between code and prose writing with	2021	767	779	13	10.1145/3468264.3468578	No DNN
Sejfa A., Zhao Y., Medvidović N.	Identifying casualty changes in software patches	2021	304	315	12	10.1145/3468264.3468624	No DNN
Yan M., Chen J., Zhang X., Tan L., Wan	Exposing numerical bugs in deep learning via gradient back-propagation	2021	627	638	12	10.1145/3468264.3468612	Engineering DNNs
Böhme M., Liyanage D., Wüstholtz V.	Estimating residual risk in greybox fuzzing	2021	230	241	12	10.1145/3468264.3468576	No DNN
Suneja S., Zheng Y., Zhuang Y., Laredo	Probing model signal-awareness via prediction-preserving input minimization	2021	945	955	11	10.1145/3468264.3468545	Engineering DNNs
Terra-Neves M., Nadekari N., Ventura M	Duplicated code pattern mining in visual programming languages	2021	1348	1359	12	10.1145/3468264.3473928	No DNN
Mehralian F., Salehnamadi N., Malek S	Data-driven accessibility repair revisited: On the effectiveness of generating labels for ic	2021	107	118	12	10.1145/3468264.3468604	DNN-based software
Bogomolov E., Kovalenko V., Rebyrk Y.	Authorship attribution of source code: A language-agnostic approach and applicability	2021	932	944	13	10.1145/3468264.3468606	No DNN
Chakraborty J., Majumder S., Menzies	Bias in machine learning software: Why? how? what to do?	2021	429	440	12	10.1145/3468264.3468537	No DNN
Tan J., Chen Y., Liu Z., Ren B., Song S.	Toward efficient interactions between Python and native libraries	2021	1117	1128	12	10.1145/3468264.3468541	No DNN
Gao Z., Xia X., Lo D., Grundy J., Zimme	Automating the removal of obsolete TODO comments	2021	218	229	12	10.1145/3468264.3468553	DNN-based software
Liu M., Peng X., Marcus A., Treude C.,	Learning-based extraction of first-order logic representations of API directives	2021	491	502	12	10.1145/3468264.3468618	No DNN
Patra J., Pradel M.	Semantic bug seeding: A learning-based approach for creating realistic bugs	2021	906	918	13	10.1145/3468264.3468623	Engineering DNNs
Li B., He Q., Chen F., Xia X., Li L., Grur	Embedding app-library graph for neural third party library recommendation	2021	466	477	12	10.1145/3468264.3468552	DNN-based software
Lukes D., Sarracino J., Coleman C., Pe	Synthesis of web layouts from examples	2021	651	663	13	10.1145/3468264.3468533	No DNN
Wang S., Wen M., Lin B., Mao X.	Lightweight global and local contexts guided method name recommendation with pri	2021	741	753	13	10.1145/3468264.3468567	DNN-based software
Wang Z., Zhang H., Chen T.-H.P., Wang	Would you like a quick peek? providing logging support to monitor data processing in	2021	516	526	11	10.1145/3468264.3468613	No DNN
Ayerdi J., Terragni V., Arrieta A., Tonei	Generating metamorphic relations for cyber-physical systems with genetic programmi	2021	1264	1274	11	10.1145/3468264.3473926	No DNN
Kalia A.K., Xiao J., Krishna R., Sinha S	Mono2Micro: A practical and effective tool for decomposing monolithic Java applicati	2021	1214	1224	11	10.1145/3468264.3473915	No DNN
Chirkova N., Troshin S.	Empirical study of transformers for source code	2021	703	715	13	10.1145/3468264.3468617	DNN-based software

Results of SCOPUS search for ESEC/FSE 2021

Authors	Title	Year	Page start	Page end	Page count	DOI	Type
Ding Y., Pervaiz A., Carbin M., Hoffman	Generalizable and interpretable learning for configuration extrapolation	2021	728	740	13	10.1145/3468264.3468603	No DNN
Robillard M.P.	Turnover-induced knowledge loss in practice	2021	1292	1302	11	10.1145/3468264.3473923	No DNN
Shi L., Chen X., Yang Y., Jiang H., Jian	A First Look at Developers' Live Chat on Gitter	2021	391	403	13	10.1145/3468264.3468562	No DNN
Hort M., Zhang J.M., Sarro F., Harman	Fairea: A model behaviour mutation approach to benchmarking bias mitigation metho	2021	994	1006	13	10.1145/3468264.3468565	No DNN
Dutta S., Shi A., Misailovic S.	FLEX: Fixing flaky tests in machine learning projects by updating assertion bounds	2021	603	614	12	10.1145/3468264.3468615	No DNN
Li Y., Wang S., Nguyen T.N.	Vulnerability detection with fine-grained interpretations	2021	292	303	12	10.1145/3468264.3468597	DNN-based software
Rabin M.R.I., Hellendoorn V.J., Alipour	Understanding neural code intelligence through program simplification	2021	441	452	12	10.1145/3468264.3468535	Engineering DNNs

Results of SCOPUS search for TSE 2018

Authors	Title	Year	Volume	Issue	Art. No.	Page start	Page end	Page count	DOI	Type
Zhang F., Niu H., Keivani	Expanding queries for code search using semantic	2018	44	11	8031055	1070	1082	13	10.1109/TSE.2017.2750682	ML no DL
Damevski K., Chen H., S	Predicting future developer behavior in the IDE us	2018	44	11	8024001	1100	1111	12	10.1109/TSE.2017.2748134	No DNN
Herbold S., Trautsch A.,	A Comparative Study to Benchmark Cross-Project	2018	44	9	7972992	811	833	23	10.1109/TSE.2017.2724538	ML no DL
Margara A., Salvaneschi	On the semantics of distributed reactive programr	2018	44	7		689	711	23	10.1109/TSE.2018.2833109	No DNN
Choetkiertikul M., Dam	Predicting Delivery Capability in Iterative Software	2018	44	6		551	573	23	10.1109/TSE.2017.2693989	ML no DL
Bennin K.E., Keung J., P	MAHAKIL: Diversity Based Oversampling Approac	2018	44	6		534	550	17	10.1109/TSE.2017.2731766	ML no DL
Petke J., Harman M., La	Specialising Software for Different Downstream Ap	2018	44	6		574	594	21	10.1109/TSE.2017.2702606	No DNN

Results of SCOPUS search for TSE 2019

Authors	Title	Year	Volume	Issue	Art. No.	Page start	Page end	Page count	DOI	Type
Song Q., Guo Y., Shepperd	A Comprehensive Investigation of the Role of Imbalanced Learning in Software Defect Prediction	2019	45	12	8359087	1253	1269	17	10.1109/TSE.2018.2836442	No DNN
Canfora G., Martinelli F., M	LEILA: Formal Tool for Identifying Mobile Malicious Behaviour	2019	45	12	8356128	1230	1252	23	10.1109/TSE.2018.2834344	No DNN
Yan M., Xia X., Shihab E., I	Automating Change-Level Self-Admitted Technical Debt Determination	2019	45	12	8352718	1211	1229	19	10.1109/TSE.2018.2831232	No DNN
Bruce B.R., Petke J., Harman	Approximate Oracles and Synergy in Software Energy Search Space	2019	45	11	8338061	1150	1169	20	10.1109/TSE.2018.2827066	No DNN
Bian P., Liang B., Zhang Y.	Detecting Bugs by Discovering Expectations and Their Violations	2019	45	10	8318656	984	1001	18	10.1109/TSE.2018.2816639	No DNN
Hoang T., Oentaryo R.J., L	Network-Clustered Multi-Modal Bug Localization	2019	45	10	8306117	1002	1023	22	10.1109/TSE.2018.2810892	No DNN
Zhang J., Zhang L., Harman	Predictive Mutation Testing	2019	45	9	8304576	898	918	21	10.1109/TSE.2018.2809496	No DNN
Choetkiertikul M., Dam H.	A Deep Learning Model for Estimating Story Points	2019	45	7	8255666	637	656	20	10.1109/TSE.2018.2792473	DNN-based software
Tantithamthavorn C., McIn	The Impact of Automated Parameter Optimization on Defect Prediction	2019	45	7	8263202	683	711	29	10.1109/TSE.2018.2794977	ML no DL
Yu T., Wen W., Han X., Hay	ConPredictor: Concurrency Defect Prediction in Real-World Applications	2019	45	6	8252721	558	575	18	10.1109/TSE.2018.2791521	No DNN
Chen J., Nair V., Krishna R	Sampling as a Baseline Optimizer for Search-Based Software Engineering	2019	45	6	8249828	597	614	18	10.1109/TSE.2018.2790925	No DNN
Xie X., Chen B., Zou L., Liu	Automatic Loop Summarization via Path Dependency Analysis	2019	45	6	8241837	537	557	21	10.1109/TSE.2017.2788018	No DNN
Peters F., Tun T.T., Yu Y.,	Text Filtering and Ranking for Security Bug Report Prediction	2019	45	6	8240740	615	631	17	10.1109/TSE.2017.2787653	ML no DL
Mottola L., Picco G.P., Op	MakeSense: Simplifying the Integration of Wireless Sensor Networks	2019	45	6	8240710	576	596	21	10.1109/TSE.2017.2787585	No DNN
Ponzanelli L., Bavota G., M	Automatic Identification and Classification of Software Development	2019	45	5	8128506	464	488	25	10.1109/TSE.2017.2779479	No DNN
Zhong H., Mei H.	An Empirical Study on API Usages	2019	45	4	8186224	319	334	16	10.1109/TSE.2017.2782280	No DNN
Gao R., Eric Wong W.	MSeer-An Advanced Technique for Locating Multiple Bugs in Parallel	2019	45	3	8119545	301	318	18	10.1109/TSE.2017.2776912	No DNN
Palomba F., Zanoni M., For	Toward a smell-aware bug prediction model	2019	45	2	8097044	194	218	25	10.1109/TSE.2017.2770122	ML no DL
Pan Y., White J., Sun Y., G	Gray computing: A framework for computing with background jobs	2019	45	2	8105894	171	193	23	10.1109/TSE.2017.2772812	No DNN
Hosseini S., Turhan B., Gu	A systematic literature review and meta-analysis on cross project defect	2019	45	2	8097045	111	147	37	10.1109/TSE.2017.2770124	No DNN

Results of SCOPUS search for TSE 2020

Authors	Title	Year	Volume	Issue	Art. No.	Page start	Page end	Page count	DOI	Type
Iannucci S., Abdel	A Model-Integrated Approach to Designing Self-Protecting Systems	2020	46	12	8528892	1380	1392	13	10.1109/TSE.2018.2880218	No DNN
Wang S., Liu T., Na	Deep Semantic Feature Learning for Software Defect Prediction	2020	46	12	8502853	1267	1293	27	10.1109/TSE.2018.2877612	DNN-based software
Li M., Wang P., Wa	Large-Scale Third-Party Library Detection in Android Markets	2020	46	9	8478000	981	1003	23	10.1109/TSE.2018.2872958	No DNN
Zou W., Lo D., Cher	How Practitioners Perceive Automated Bug Report Management Tec	2020	46	8	8466000	836	862	27	10.1109/TSE.2018.2870414	No DNN
Nair V., Yu Z., Menz	Finding Faster Configurations Using FLASH	2020	46	7	8469102	794	811	18	10.1109/TSE.2018.2870895	No DNN
Fan Y., Xia X., Lo D	Chaff from the Wheat: Characterizing and Determining Valid Bug Re	2020	46	5	8428477	495	525	31	10.1109/TSE.2018.2864217	No DNN
Peitek N., Siegmun	A Look into Programmers' Heads	2020	46	4	8425769	442	462	21	10.1109/TSE.2018.2863303	No DNN
Moran K., Bernal-C	Machine Learning-Based Prototyping of Graphical User Interfaces fo	2020	46	2	8374985	196	221	26	10.1109/TSE.2018.2844788	DNN-based software
Zhou Z.Q., Sun L., C	Metamorphic relations for enhancing system understanding and use	2020	46	10		1120	1154	35	10.1109/TSE.2018.2876433	No DNN
Rao M., Bacon D.F.	Incentivizing Deep Fixes in Software Economies	2020	46	1	8384304	51	70	20	10.1109/TSE.2018.2842188	No DNN
Nassif M., Treude C	Automatically Categorizing Software Technologies	2020	46	1	8359344	20	32	13	10.1109/TSE.2018.2836450	No DNN
Fucci D., Scanniell	Need for Sleep: The Impact of a Night of Sleep Deprivation on Novic	2020	46	1	8357494	1	19	19	10.1109/TSE.2018.2834900	No DNN
Wen M., Wu R., Che	How Well Do Change Sequences Predict Defects? Sequence Learnin	2020	46	11		1155	1175	21	10.1109/TSE.2018.2876256	ML no DL
Huang Q., Xia X., L	Automating Intention Mining	2020	46	10		1098	1119	22	10.1109/TSE.2018.2876340	DNN-based software

Results of SCOPUS search for TSE 2021

Authors	Title	Year	Volume	Issue	Art. No.	Page start	Page end	Page count	DOI	Type
Chen H., Jing	An Empirical Study on Heterogeneous Defect Prediction Approaches	2021	47	12		2803	2822	20	10.1109/TSE.2020.2968520	No DNN
Zhou Y., Su Y	User Review-Based Change File Localization for Mobile Applications	2021	47	12		2755	2770	16	10.1109/TSE.2020.2967383	No DNN
Krishna R., N	Whence to Learn? Transferring Knowledge in Configurable Systems Using	2021	47	12		2956	2972	17	10.1109/TSE.2020.2983927	No DNN
Yamagata Y.	Falsification of Cyber-Physical Systems Using Deep Reinforcement Learning	2021	47	12		2823	2840	18	10.1109/TSE.2020.2969178	No DNN
Gao Z., Jiang	Checking Smart Contracts with Structural Code Embedding	2021	47	12		2874	2891	18	10.1109/TSE.2020.2971482	DNN-based software
Ali K., Lai X.	A Study of Call Graph Construction for JVM-Hosted Languages	2021	47	12		2644	2666	23	10.1109/TSE.2019.2956925	No DNN
Morales R., S	MoMIT: Porting a JavaScript Interpreter on a Quarter Coin	2021	47	12		2771	2785	15	10.1109/TSE.2020.2968061	No DNN
Mahadewa K	Scrutinizing Implementations of Smart Home Integrations	2021	47	12		2667	2683	17	10.1109/TSE.2019.2960690	No DNN
Zhou J., Wan	Studying the Association between Bountysource Bounties and the Issue	2021	47	12		2919	2933	15	10.1109/TSE.2020.2974469	No DNN
Sayagh M., H	ConfigMiner: Identifying the Appropriate Configuration Options for Config	2021	47	12		2907	2918	12	10.1109/TSE.2020.2973997	No DNN
Li H., Shang	A Qualitative Study of the Benefits and Costs of Logging from Developers	2021	47	12		2858	2873	16	10.1109/TSE.2020.2970422	No DNN
Zhang H., Wa	Reading Answers on Stack Overflow: Not Enough!	2021	47	11		2520	2533	14	10.1109/TSE.2019.2954319	No DNN
Hoang T., La	PatchNet: Hierarchical Deep Learning-Based Stable Patch Identification for	2021	47	11		2471	2486	16	10.1109/TSE.2019.2952614	DNN-based software
Yu Z., Theise	Improving Vulnerability Inspection Efficiency Using Active Learning	2021	47	11		2401	2420	20	10.1109/TSE.2019.2949275	No DNN
Zhang T., Ch	Where2Change: Change Request Localization for App Reviews	2021	47	11		2590	2616	27	10.1109/TSE.2019.2956941	No DNN
Gao J., Jiang	Semantic Learning and Emulation Based Cross-Platform Binary Vulnerability	2021	47	11		2575	2589	15	10.1109/TSE.2019.2956932	DNN-based software
Udeshi S., Ch	Grammar Based Directed Testing of Machine Learning Systems	2021	47	11		2487	2503	17	10.1109/TSE.2019.2953066	Engineering DNNs
Manes V.J.M	The Art, Science, and Engineering of Fuzzing: A Survey	2021	47	11		2312	2331	20	10.1109/TSE.2019.2946563	No DNN
Koch P., Sch	Metric-Based Fault Prediction for Spreadsheets	2021	47	10		2195	2207	13	10.1109/TSE.2019.2944604	ML no DL
Mehrotra A.,	FutureWare: Designing a Middleware for Anticipatory Mobile Computing	2021	47	10		2107	2124	18	10.1109/TSE.2019.2943554	No DNN
Zou W., Lo D	Smart Contract Development: Challenges and Opportunities	2021	47	10		2084	2106	23	10.1109/TSE.2019.2942301	No DNN
Ma S., Xing Z	Easy-to-Deploy API Extraction by Multi-Level Feature Embedding and Transfer	2021	47	10		2296	2311	16	10.1109/TSE.2019.2946830	DNN-based software
Afzal A., Mot	SOSRepair: Expressive Semantic Search for Real-World Program Repair	2021	47	10		2162	2181	20	10.1109/TSE.2019.2944914	No DNN
Agrawal A., F	How to 'DODGE' Complex Software Analytics	2021	47	10		2182	2194	13	10.1109/TSE.2019.2945020	No DNN
Tong H., Liu	Kernel spectral embedding transfer ensemble for heterogeneous defect prediction	2021	47	9		1886	1906	21	10.1109/TSE.2019.2939303	No DNN
Sun C.-A., Fu	METRIC+: A metamorphic relation identification technique based on input	2021	47	9		1764	1785	22	10.1109/TSE.2019.2934848	No DNN
Liu Z., Xia X.	Which variables should I log?	2021	47	9		2012	2031	20	10.1109/TSE.2019.2941943	DNN-based software
Wan Z., Xia X	How does machine learning change software development practices?	2021	47	9		1857	1871	15	10.1109/TSE.2019.2937083	Engineering DNNs
Pham V.-T., F	Smart greybox fuzzing	2021	47	9		1980	1997	18	10.1109/TSE.2019.2941681	No DNN
Chen X., Che	SEthesaurus: WordNet in software engineering	2021	47	9		1960	1979	20	10.1109/TSE.2019.2940439	No DNN
Chen Z., Kon	SequenceR: Sequence-to-sequence learning for end-to-end program repair	2021	47	9		1943	1959	17	10.1109/TSE.2019.2940179	DNN-based software
Liu H., Jin J.	Deep learning based code smell detection	2021	47	9		1811	1837	27	10.1109/TSE.2019.2936376	DNN-based software
Sohn J., Yoo	Empirical Evaluation of Fault Localisation Using Code and Change Metrics	2021	47	8	8772166	1605	1625	21	10.1109/TSE.2019.2930977	No DNN
Sharma V., H	Finding Substitutable Binary Code by Synthesizing Adapters	2021	47	8	8776650	1626	1643	18	10.1109/TSE.2019.2931000	No DNN
Fan Y., Xia X	The Impact of Mislabeled Changes by SZZ on Just-in-Time Defect Prediction	2021	47	8	8765743	1559	1586	28	10.1109/TSE.2019.2929761	No DNN
Huo X., Thun	Deep Transfer Bug Localization	2021	47	7	8736995	1368	1380	13	10.1109/TSE.2019.2920771	DNN-based software
Wan Z., Xia X	What Do Programmers Discuss about Blockchain? A Case Study on the E	2021	47	7	8732384	1331	1349	19	10.1109/TSE.2019.2921343	No DNN
Mader P., Ku	Reactive Auto-Completion of Modeling Activities	2021	47	7	8745532	1431	1451	21	10.1109/TSE.2019.2924886	No DNN
Temple P., A	Empirical Assessment of Multimorphic Testing	2021	47	7	8755468	1511	1527	17	10.1109/TSE.2019.2926971	No DNN
Viviani G., Fa	Locating Latent Design Information in Developer Discussions: A Study on	2021	47	7	8742578	1402	1413	12	10.1109/TSE.2019.2924006	No DNN
Zhou Z.Q., Ts	Metamorphic Robustness Testing: Exposing Hidden Defects in Citation S	2021	47	6	8708940	1164	1183	20	10.1109/TSE.2019.2915065	No DNN
Hu Y., Wang	A Semantics-Based Hybrid Approach on Binary Code Similarity Comparison	2021	47	6	8721093	1241	1258	18	10.1109/TSE.2019.2918326	No DNN
Zhang J., Jia	Enriching API Documentation with Code Samples and Usage Scenarios for	2021	47	6	8723145	1299	1314	16	10.1109/TSE.2019.2919304	No DNN
Svajlenko J.,	The Mutation and Injection Framework: Evaluating Clone Detection Tools	2021	47	5	8695849	1060	1087	28	10.1109/TSE.2019.2912962	No DNN
Mo R., Cai Y.	Architecture Anti-Patterns: Automatically Detectable Violations of Design P	2021	47	5	8691586	1008	1028	21	10.1109/TSE.2019.2910856	No DNN
Zhang H., Wa	An Empirical Study of Obsolete Answers on Stack Overflow	2021	47	4	8669958	850	862	13	10.1109/TSE.2019.2906315	No DNN
Grano G., Pa	Lightweight Assessment of Test-Case Effectiveness Using Source-Code	2021	47	4	8658120	758	774	17	10.1109/TSE.2019.2903057	No DNN
Scalabrino S	Automatically Assessing Code Understandability	2021	47	3	8651396	595	613	19	10.1109/TSE.2019.2901468	ML no DL

Results of SCOPUS search for TSE 2021

Authors	Title	Year	Volume	Issue	Art. No.	Page start	Page end	Page count	DOI	Type
Uddin G., Kh	Automatic Mining of Opinions Expressed about APIs in Stack Overflow	2021	47	3	8643972	522	559	38	10.1109/TSE.2019.2900245	No DNN
Chen C., Xing	Mining Likely Analogical APIs across Third-Party Libraries via Large-Scale	2021	47	3	8630054	432	447	16	10.1109/TSE.2019.2896123	DNN-based software
Qu Y., Zheng	Using K-core Decomposition on Class Dependency Networks to Improve	2021	47	2	8611396	348	366	19	10.1109/TSE.2019.2892959	No DNN
Zou D., Liang	An Empirical Study of Fault Localization Families and Their Combinations	2021	47	2	8607117	332	347	16	10.1109/TSE.2019.2892102	No DNN
Noei E., Zhar	Too Many User-Reviews! What Should App Developers Look at First?	2021	47	2	8613795	367	378	12	10.1109/TSE.2019.2893171	No DNN
Al-Subaihin	App Store Effects on Software Engineering Practices	2021	47	2	8606261	300	319	20	10.1109/TSE.2019.2891715	No DNN
Jiarpakdee J	The Impact of Correlated Metrics on the Interpretation of Defect Models	2021	47	2	8608002	320	331	12	10.1109/TSE.2019.2891758	No DNN
Chen J., War	Coverage Prediction for Accelerating Compiler Testing	2021	47	2	8588375	261	278	18	10.1109/TSE.2018.2889771	No DNN
Zhou X., Pen	Fault Analysis and Debugging of Microservice Systems: Industrial Survey	2021	47	2	8580420	243	260	18	10.1109/TSE.2018.2887384	No DNN
Yu L., Luo X.	PPChecker: Towards Accessing the Trustworthiness of Android Apps' Pri	2021	47	2	8576579	221	242	22	10.1109/TSE.2018.2886875	No DNN
Aghajani E.,	Automated Documentation of Android Apps	2021	47	1	8598894	204	220	17	10.1109/TSE.2018.2890652	No DNN
Liu K., Kim D	Mining Fix Patterns for FindBugs Violations	2021	47	1	8565907	165	188	24	10.1109/TSE.2018.2884955	DNN-based software
Palomba F.,	Beyond Technical Aspects: How Do Community Smells Influence the Int	2021	47	1	8546762	108	129	22	10.1109/TSE.2018.2883603	No DNN
Dam H.K., Tr	Automatic Feature Learning for Predicting Vulnerable Software Componer	2021	47	1	8540022	67	85	19	10.1109/TSE.2018.2881961	DNN-based software
Sobrinho E.V	A Systematic Literature Review on Bad Smells-5 W's: Which, When, Wha	2021	47	1	8532309	17	66	50	10.1109/TSE.2018.2880977	No DNN