

File - extract_s_vo_dic

```
C:\Users\AMIT\AppData\Local\Programs\Python\Python37\python.exe "C:/Users/AMIT/Documents/Python Scripts/project/extract_s_vo_dic.py"
1 . Using Support Vector Machines to Classify Student Attentiveness for
the Development of Personalized Learning Systems
```

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'many studies')	1
('classify', 'student attentiveness')	2
('apply', 'algorithms')	1
('improve', 'results research')	1
('implement', 'instructors')	1
('provide', 'data algorithms')	2
('improve', 'feedback')	1
('improve', 'instructional strategies')	1
('do', 'work')	1
('help', 'efforts many areas education')	1
('create', 'improving strategies')	1
('create', 'instructional strategies')	1

Nouns....

DATA	FREQUENCY
study	1
researcher	1
student attentiveness	2
approach	2
analysis	2
work	3
gap	1
research	3
machine	2
k-means	1
svm	1
student	3
data	2
consumer rgb-d sensor	1
result	1
teaching strategies	1
instructor	4
level	1
system	1

File - extract_s_vo_dic

academy	1
engineering	1
challenge	1
algorithm	2
setting	1
feedback	2
effectiveness	1
strategy	3
pedagogy	1
learning	2
mastery	1
ability	1
area	2
effort	1
education	1
instruction	1
person	1
future workforce	1

2 . The application of machine learning algorithm in underwriting process

Verb-Object Pairs....

DATA	FREQUENCY
('analyse', 'actual underwriting methods insurance companies')	1
('mine', 'incomplete database insurance company')	1
('apply', 'support vector machine svm')	1
('improve', 'directions')	1
('promise', 'future')	1

Nouns....

DATA	FREQUENCY
paper	2
underwriting methods	1
life insurance companies	1
point	1
merit	1
shortcoming	1
method	1
database	1
insurance company	1
data mining	1
association rule algorithm	1
support vector machine	1
svm	1
process	2

File - extract_s_vo_dic

applicant	1
direction	1
algorithm	2
future	1

3 . A new heuristic of the decision tree induction

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'one useful approaches')	1
('extract', 'classification knowledge')	1
('be', 'minimum entropy')	1
('have', 'serious disadvantage capability 3')	1
('be', 'classification technique machine learning')	1
('have', 'good generalization')	1
('use', 'large margin svm')	2
('improve', 'order')	1
('propose', 'tree induction algorithm')	1
('use', 'binary decision tree')	2

Nouns....

DATA	FREQUENCY
decision tree induction	1
approach	1
classification knowledge	1
set	1
instance	1
information	4
decision tree generation	1
entropy	2
generalization capability	4
]	1
support vector machine	2
svm	3
classification technique	1
machine	1
theory	1
generalization	1
relationship	1
classification margin	1

File - extract_s_vo_dic

margin	1
decision tree	2
order	1
paper	1
decision tree induction algorithm	1
margin heuristic	1
experiment	1
heuristic	1

4 . An incremental learning approach for restricted boltzmann machines

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'challenging issue')	1
('solve', 'vision problems')	1
('use', 'restricted boltzmann machines rbms')	1
('propose', 'learning algorithm')	1
('compose', 'algorithm')	1
('determine', 'two processes')	1
('compute', 'two processes')	1
('use', 'error')	1
('determine', 'incrementation necessity')	1
('prevent', 'unnecessary increment number training')	1
('outperform', 'incremental rbm')	1

Nouns....

DATA	FREQUENCY
determination	1
model complexity	2
issue	1
computer vision problems	1
boltzmann machines	1
rbms	2
algorithm	4
feature	5
cross-validation	1
method	1
number	4
work	1

File - extract_s_vo_dic

learning algorithm	1
layer	1
process	1
incrementation necessity	2
neuron	1
increment	2
reconstruction error	1
order	1
prevent	1
training	1
result	1
layer rbms	1
classification results	1
model	1
rbm	1

5 . Chinese Text Categorization study based on feature weight learning

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'important component many information organization')	1
('be', 'feature coding')	1
('be', 'classifier design')	1
('choose', 'euclidean distance')	1
('have', 'different functions')	1
('describe', 'samples')	1
('decide', 'different function every feature')	1
('base', 'k nearest neighbor algorithm')	1
('prove', 'validity')	1
('learn', 'algorithm')	1

Nouns....

DATA	FREQUENCY
categorization	1
tc	2
component	1
information organization	1
information management tasks	1
issue	1
coding	1

File - extract_s_vo_dic

design	1
distance	1
similarity measure	1
neighbor classification algorithm	1
feature	3
vector	1
function	2
sample	1
learning	1
paper text categorization	1
neighbor algorithm	1
feature weight learning	1
experiment	1
validity	1
learning algorithm	1

6 . Application of machine learning techniques to Web-based intelligent learning diagnosis system

Verb-Object Pairs....

DATA	FREQUENCY
('propose', 'intelligent system')	1
('support', 'model')	1
('cultivate', 'learners ability knowledge integration')	2
('give', 'learners')	1
('give', 'opportunities')	1
('select', 'learning topics')	1
('gain', 'knowledge')	1
('search', 'related learning courseware')	1
('record', 'log files')	1
('give', 'intelligent diagnosis system')	1
('predict', 'achievement learners final reports')	1
('expand', 'learners')	1
('expand', 'knowledge')	1

Nouns....

DATA	FREQUENCY
------	-----------

File - extract_s_vo_dic

work	1
learning diagnosis system	2
learning model	1
learner	6
ability	1
knowledge integration	1
opportunity	1
learning topics	1
gain knowledge	1
topic	1
internet	1
learning courseware	1
colleague	1
log	1
record	1
online	1
behavior	1
diagnosis system	2
guidance	1
study behaviors	1
online class participation	1
instructor	1
achievement	1
report	1
result	1
knowledge	1
cyberspace	1
learning	1
model	1

7 . A new semi-supervised support vector machine learning algorithm based on active learning

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'extension real life')	1
('have', 'drawbacks slower training speed accuracy')	1
('present', 'vector machine')	1
('learn', 'algorithm')	1
('train', 'early learner')	1
('learn', 'cost')	2
('learn', 'support vector')	2
('delete', 'non-')	1

('get', 'good effect')	1
------------------------	---

Nouns....

DATA	FREQUENCY
support vector machine	3
extension	1
machine learning problem	1
life	1
support vector machine algorithm	1
drawback	1
training speed	1
accuracy	1
paper	1
algorithm	2
learning	3
learner	1
spot	1
labeled-data	1
training samples	1
training	1
reduces	1
cost	1
support vector	1
experiment	1
learning effect	1
learning cost	1

8 . Deep Transfer Learning via Restricted Boltzmann Machine for Document Classification

Verb-Object Pairs....

DATA	FREQUENCY
('improve', 'task')	1
('use', 'related auxiliary learning tasks')	1
('use', 'data')	1
('focus', 'current methods')	1
('call', 'scenario')	1
('call', 'learning scenario')	1
('introduce', 'novel learning method deep transfer')	1
('select', 'subset')	1

File - extract_s_vo_dic

('augment', 'target data')	2
('improve', 'classification accuracy')	1
Nouns....	
DATA	FREQUENCY
transfer	2
aim	1
learning task	1
learning tasks	1
data	4
methods focus	1
scenario	2
target learning tasks	1
either	1
training examples	1
target task	1
target data share	1
representation	1
case	1
connection	2
target tasks	2
feature	4
target learning	2
transfer-learning scenario	1
method	2
machine	1
set	1
subset	1
selection criterion	1
concept	1
alignment	1
target data	1
training	1
result	1
transfer method	1
classification accuracy	1
%	1

9 . Apply Support Vector Machine for CRM Problem

Verb-Object Pairs....

DATA	FREQUENCY
('learn', 'available knowledge customer relationship machine learning')	1
('instruct', 'strategic behavior')	1
('obtain', 'profit')	1

File - extract_s_vo_dic

('propose', 'machine svms')	1
('apply', 'svms')	1
('report', 'good general performance crm problem')	1

Nouns....

DATA	FREQUENCY
data mining	2
crm	1
knowledge	1
customer relationship	1
machine learning	1
method	1
behavior	1
profit	1
year	1
support vector machine	1
svms	3
power tool	1
machine leaning	1
paper	1
crm problem	2
company	1
result	1
performance	1

10 . A user-centric machine learning framework for cyber security operations center

Verb-Object Pairs....

DATA	FREQUENCY
('investigate', 'alerts')	1
('handle', 'alerts')	1
('be', 'viable approach')	1
('reduce', 'false positive rate')	1
('improve', 'productivity soc analysts')	1
('develop', 'centric framework operation center real enterprise environment')	1
('discuss', 'typical data sources flow')	1
('leverage', 'data sets')	1
('process', 'data sets')	2

('build', 'effective system')	1
('target', 'paper')	1
('be', 'data scientists')	1
('be', 'researchers')	1
('!have', 'knowledge')	1
('!build', 'machine learning systems operations center')	2
('be', 'cyber security practitioners')	1
('have', 'deep knowledge')	1
('have', 'expertise')	1
('use', 'system')	1
('demonstrate', 'complete steps data collection creation')	1
('learn', 'algorithm selection evaluations')	1
('risk', 'score generation')	1

Nouns....

	FREQUENCY
DATA	
security	2
enterprise	1
security information	1
event management	1
system	4
place	1
security events	1
technology	1
flag alerts	1
analyst	1
security operation center	2
soc	3
alert	3
number	1
majority	1
capacity	1
attack	1
host	1
machine learning	1
approach	1
rate	1
productivity	1
soc analysts	1
paper	3

File - extract_s_vo_dic

machine learning framework	1
enterprise environment	1
data sources	1
work flow	1
data sets	1
machine	3
towards	1
group	3
reader	1
scientist	1
machine learning researchers	1
security domain knowledge	1
security operations center	1
audience	1
security practitioners	1
knowledge	1
expertise	1
machine learning experiences	1
soc production environment	1
example	1
step	1
data collection	1
creation	1
feature engineering	1
selection	1
model performance evaluations	1
score generation	1

11 . Comparison of Classification Techniques used in Machine Learning as Applied on Vocational Guidance Data

Verb-Object Pairs....

DATA	FREQUENCY
('use', 'mining techniques')	1
('range', 'various fields')	1
('establish', 'organizations')	1
('establish', 'future policies')	1
('apply', 'classification algorithms')	1

Nouns....

DATA	FREQUENCY
development	1
information systems	1
computerization	1
business processes	1

File - extract_s_vo_dic

organization	2
faster	1
data analysis	1
data mining	3
machine	3
technique	3
analysis	1
data	3
field	1
medicine	1
finance	1
education	1
energy applications	1
information	2
policy	1
basis	1
advantage	1
term	1
time	1
cost	1
study	1
classification algorithms	1
individual	1
guidance process	1
try	1
algorithm	1

12 . Fitting and Prediction for Crack Propagation Rate Based on Machine Learning Optimal Algorithm

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'establishing rate')	1
('apply', 'model')	1
('apply', 'mcevily model')	1
('calculate', 'partial derivative')	1
('be', 'partial derivative')	1
('simulate', 'complicated rate curve')	2
('learn', 'conformation')	1
('select', 'parameters')	1
('search', 'network')	1

File - extract_s_vo_dic

('cross', 'network')	1
('cross', 'method')	1
('optimize', 'whose parameter')	1
('provide', 'simple intelligent approach fatigue analysis')	1

Nouns....

DATA	FREQUENCY
crack propagation rate	1
structure fatigue lifetime	1
parameter	4
propagation rate model	1
model	4
derivative	1
deviation	1
value	1
conception	1
accordance	1
disadvantage	1
method	3
parameter selection	1
search	1
cross validation	2
machine	1
algorithm	2
square	1
machine-lssvm	1
crack propagation rate forecast	1
fatigue crack propagation rate curve	1
network design	1
conformation	1
lssvm	1
svm parameters	1
network	1
validation	1
error	1
output value	2
propagation rate	1
ability	1
modeling	1
generalization	1
approach	1
fatigue analysis	1

13 . Financial Data Mining Based on Support Vector Machines and Ensemble Learning

Verb-Object Pairs....

File - extract_s_vo_dic

DATA	FREQUENCY
('be', 'one important research topics mining community')	1
('be', 'two popular techniques field')	1
('classify', 'machines')	1
('classify', 'ensemble learning')	1
('achieve', 'obvious improvement performance')	1

Nouns....

DATA	FREQUENCY
development	1
e-commerce	1
data mining	1
research topics	1
data mining community	1
support vector machines	2
svms	2
learning	2
technique	1
machine	1
field	1
paper	1
data	1
experiment	1
dataset show	1
achieves	1
improvement	1
performance	1

14 . A heuristic algorithm to incremental support vector machine learning

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'possible solutions')	1
('handle', 'vast data')	1
('summarize', 'data space')	1
('take', 'heuristic algorithm')	1
('take', 'possible impact new training data')	1
('have', 'less elements')	1

File - extract_s_vo_dic

```
('improve', 'classification precision') 2
```

Nouns....

DATA	FREQUENCY
learning techniques	1
solution	1
data	2
information	1
internet	1
support vector machine	1
model	1
performance	1
power	1
data space	1
concise way	1
paper	1
algorithm	4
svm	1
impact	1
history data	2
account	1
idea	1
partition difference	2
element	1
hyperplane	2
support vectors	2
consist	1
partition difference set	1
training data	1
classification precision	2
computation complexity	1
classification hyperplane	1
support vector set	1
result	1

15 . Statistical Machine Learning Used in Integrated Anti-Spam System

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'integrated spam system')	1
('adopt', 'machine learning filter spam')	1
('base', 'methods linear classification')	2
('use', 'methods linear classification')	1
('use', 'method bayes')	1

File - extract_s_vo_dic

('improve', 'performance iass')	1
---------------------------------	---

Nouns....

DATA	FREQUENCY
ia	2
anti-spam system	1
machine	1
spam	1
intelligent	1
way	1
method	2
classification	1
hyperplane	1
k-means	1
action recognition layer	1
bayes	1
analysis layer	1
application	1
machine learning	1
performance	1

16 . Dynamic single machine scheduling using Q-learning agent

Verb-Object Pairs....

DATA	FREQUENCY
('attract', 'lot attentions')	1
('perform', 'single dispatching rule')	1
('take', 'rule')	3
('train', 'agent')	2
('use', 'one rule')	1

Nouns....

DATA	FREQUENCY
machine	3
method	1
lot	1
attention	1
year	1
problem	1
practice	1
dispatching rules	2
dispatching rule	3
criterion	2
rule	1

File - extract_s_vo_dic

account	1
status	1
resource	1
system	1
environment	1
research	1
machine scheduling system	1
agent	5
algorithm	2
scheduling system	1
information	1
simulation results	1
system objectives	1
result	1

17 . Sensitivity based Growing and Pruning method for RBF network in online learning environments

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'one major research topics online learning')	1
('present', 'new online learning algorithm function network')	1
('present', 'algorithm')	1
('name', 'sensitivity')	1
('name', 'neurons')	1
('achieve', 'litter higher accuracy')	1

Nouns....

DATA	FREQUENCY
architecture	1
classifier	1
research topics	1
online learning	1
paper	1
online learning algorithm	1
basis function network	1
sensitivity	1
neuron	2
method	2
rbf network	1
sbgap	3
performance	1
accuracy	2
number	1

File - extract_s_vo_dic

result	1
litter	1
unit	1
situation	1

18 . A New Fuzzy Multicategory Support Vector Machines Classifier

Verb-Object Pairs....

DATA	FREQUENCY
('propose', 'new fuzzy vector machines classifier')	1
('use', 'knowledge ambiguity')	1
('use', 'l2-norm')	1
('have', 'improvement aspects classification accuracy')	1

Nouns....

DATA	FREQUENCY
paper	1
multicategory support vector machines	1
fmsvm	3
classifier	1
idea	1
knowledge	1
ambiguity	1
membership	1
sample	2
class	1
location	1
origin	1
svms	1
l2-norm	1
function	1
improvement	1
aspect	1
classification accuracy	1
effect	1
noise	1
outlier	1

19 . Improved Fuzzy Multicategory Support Vector Machines Classifier

Verb-Object Pairs....

DATA	FREQUENCY
------	-----------

File - extract_s_vo_dic

```
('investigate', 'improved machines classifier ifmsvm') 1  
('improve', 'knowledge ambiguity') 1  
('improve', 'classification performance high generalization capability')  
1  
('show', 'feasibility') 1  
('show', 'effectiveness') 1  
  
Nouns....  
DATA FREQUENCY  
paper 1  
fuzzy multicategory support vector machines classifier 1  
  
ifmsvm 1  
knowledge 1  
ambiguity 1  
membership 1  
data samples 1  
class 1  
location 1  
origin 1  
classification performance 1  
generalization capability 1  
aspect 1  
accuracy 1  
algorithm 2  
support vector classification algorithms 1  
simulation 1  
feasibility 1  
effectiveness 1
```

20 . A survey on active learning strategy

Verb-Object Pairs....

```
DATA FREQUENCY  
('be', 'hot topic field') 1  
('select', 'representative instances') 1  
('reduce', 'sample complexity') 1  
('present', 'brief survey active learning') 1
```

Nouns....

```
DATA FREQUENCY  
learning 2
```

File - extract_s_vo_dic

topic	1
machine learning field	1
task	1
representative instances	1
sample complexity	1
paper	1
survey	1
selection methods	1
query strategies	1
application	1
work	1

21 . A new nu-support vector machine for training sets with duplicate samples

Verb-Object Pairs....

DATA	FREQUENCY
('have', 'samples')	1
('overcome', 'problem')	1
('propose', 'new /spl nu/-svm')	1
('compute', 'weight factor')	1
('have', 'precision rate standard')	1
('have', 'value samples')	1

Nouns....

DATA	FREQUENCY
nu/-svm	3
training sample	1
sample	2
value	2
dependence	1
time	1
training	3
support vectors	1
decision time	1
order	1
problem	1
multiplies	1
slack variable	1
function	1
weight factor	2
number	1
analysis	1
result	1

File - extract_s_vo_dic

experiment	1
/spl nu/-svm	2
classification precision rate	1
decision	1
training sets	1
value samples	1

22 . Restricted Boltzmann Machine for Nonlinear System Modeling

Verb-Object Pairs....

DATA	FREQUENCY
('use', 'deep learning method restricted boltzmann machine')	1
('have', 'neural model')	1
('obtain', 'initial weights deep neural model')	1
('propose', 'special unsupervised learning methods input data')	1
('train', 'normal supervised learning')	2

Nouns....

DATA	FREQUENCY
paper	1
learning method	1
machine	1
system identification	1
model	2
architecture	1
search method	1
weight	2
boltzmann machines	1
system	2
method	1
input data	1
learning	1
output data	1
algorithm	1

23 . Application research of support vector machine in E-Learning for personality

Verb-Object Pairs....

DATA	FREQUENCY
('build', 'learner learning style')	1

```
('combine', 'silverman learning style') 1
('support', 'vector machine technology') 1
('demonstrate', 'correctness') 1
('demonstrate', 'feasibility') 1
('build', 'vector machine') 1
('build', 'styles') 2
('make', 'great contribution') 1
('build', 'interaction environment') 1
```

Nouns....

DATA	FREQUENCY
order	1
learner	2
style	4
e-learning	2
need	1
preference	1
learning materials	1
interaction environment	2
paper	1
support vector machine technology	2
machine learning technologies	1
analysis	1
emotion	2
recognition interaction	2
theory	1
correctness	1
feasibility	1
support vector machine	2
combination	1
contribution	1

24 . From bits to information with learning machines: theory and applications

Verb-Object Pairs....

DATA	FREQUENCY
('become', 'central problem')	1
('understand', 'intelligence')	2

File - extract_s_vo_dic

('develop', 'intelligent machines')	2
('outline', 'previous efforts machines')	1
('sketch', 'authors work problem classification')	1
('connect', 'regularization theory')	1
('support', 'vector machines')	1
('be', 'classification')	1
('be', 'regression')	1
('describe', 'evolution trainable detection system')	1
('classify', 'objects complex cluttered images')	1
('work', 'brain')	1
('review', 'brain')	1
('review', 'implications')	1
('represent', '3d objects')	1

Nouns....

DATA	FREQUENCY
form	1
learning	1
problem	2
intelligence	1
machine	2
paper	2
effort	1
learn	1
author	1
work	1
theory	1
result	1
classification	2
function approximation	1
regularization theory	1
support vector machines	1
application focus	1
regression	1
sound	1
text	1
video	1
bioinformatics	1
evolution	1
detection system	1
people	1

File - extract_s_vo_dic

complex	1
image	1
implication	1
research	1
brain works	1
data	1
glimpse	1
object	1
cortex	1

25 . Machine learning for automatic acquisition of Chinese linguistic ontology knowledge

Verb-Object Pairs....

DATA	FREQUENCY
('present', 'learning method')	1
('acquire', 'chinese linguistic ontology knowledge typical corpus')	1
('define', 'description frame chinese linguistic ontology knowledge')	1
('use', 'semantic information')	1
('complete', 'two groups')	1
('solve', 'inferior precision language processing')	1

Nouns....

DATA	FREQUENCY
complexity	1
flexibility	1
language	1
knowledge acquisition	1
application research	1
paper	1
machine	1
method	2
ontology knowledge	2
corpus	2
study	1
description frame	1
usage	1
word	1
co-occurrence	1
context	1
pragmatic	1
information	1
representation act	1
ontology knowledge bank	1

File - extract_s vo_dic

group	1
experiment	1
i.e	1
documents similarity computing	1
text reordering	1
information retrieval	1
work	1
precision	1
language processing	1

26 . Integrated access to big data polystores through a knowledge-driven framework

Verb-Object Pairs....

DATA	FREQUENCY
('cast', 'spotlight')	2
('consume', 'data')	1
('present', 'paper')	1
('enable', 'framework')	1
('give', 'framework')	1
('capture', 'data')	1
('store', 'data')	2
('adopt', 'platform')	1
('describe', 'ease use')	1
('construct', 'polystore knowledge graphs semtk')	1
('query', 'polystore knowledge graphs semtk')	2

Nouns....

DATA	FREQUENCY
success	1
cognitive	1
ai applications	1
spotlight	1
knowledge graphs	2
benefit	2
data	6
today	1
extent	1
organization	2

File - extract_s_vo_dic

source	1
truth "	1
artifact	1
form	1
time series	1
image	1
text	1
storage	1
knowledge graph	2
paper	1
semantics toolkit	1
semtk	2
framework	1
access	2
data stores	2
appearance	1
storage platforms	1
e.g.	1
hadoop	1
graph databases	1
triple stores	1
platform	1
data type	1
interface	1
point	1
user	1
veneer	1
ease	1
use	1
polystore knowledge graphs	1
use cases	1
ge	1

27 . Web-based collaborative big data analytics on big data as a service platform

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'new challenge')	1
('analyze', 'large volume data')	1
('!become', 'proper solution')	1
('process', 'big data')	1
('develop', 'analysis service')	1
('take', 'long time')	1

File - extract_s_vo_dic

```
('present', 'collaborative big analytics platform big data service') 1  
('describe', 'big analytics platform') 1  
('manage', 'big data') 2  
('develop', 'analytics algorithms') 1  
('develop', 'services') 1  
('introduce', 'metadata analytics service') 1
```

Nouns....

	FREQUENCY
DATA	
data	7
development	1
network	1
cloud computing	1
challenge	1
processing	1
volume	1
technology	1
solution	1
data platform	2
user	1
analysis service	1
time	1
algorithm	2
analytics services	1
data analytics platform	1
service	3
developer	1
platform	2
paper	1
data analytics	1
analytics algorithms	1
data owners	1
data scientists	1
service developers	1
web	1
cctv metadata analytics service	1

28 . A timeline visualization system for road traffic big data

Verb-Object Pairs....

	FREQUENCY
DATA	
('provide', 'opportunities')	1
('discuss', 'visualization tool')	1

('enable', 'us')	1
------------------	---

Nouns....

DATA	FREQUENCY
converging	1
data	2
iot	1
internet	1
thing	1
technology	1
opportunity	1
area	1
road traffic applications	1
paper	1
timeline visualization tool	1
understand	1
traffic behaviors	1
road traffic	1

29 . Towards a big data requirements engineering artefact model in the context of big data software development projects: Poster extended abstract

Verb-Object Pairs....

DATA	FREQUENCY
('describe', 'ongoing research')	1
('define', 'requirements')	1
('engineer', 'artefact model')	1
('provide', '" big picture " requirements work products')	1
('be', 'ream')	1
('use', 'important tools')	1

Nouns....

DATA	FREQUENCY
paper	1
research	1
requirements engineering	1
model	2
ream	2
context	1
data software applications	1
picture "	1

File - extract_s vo_dic

requirements engineering work products	1
data software development projects	1
tool	1
reference	1
definition	1
re models	1
system	1
process	2
data software engineering research	1

30 . Sharing best practices for the implementation of Big Data applications in government and science communities

Verb-Object Pairs....

DATA	FREQUENCY
('support', 'federal big data group')	1
('share', 'meetups')	1
('share', 'best practices implementation big data applications government communities')	1
('take', 'order')	1
('use', 'information')	1
('use', 'cases publications')	1
('illustrate', 'range topics')	2

Nouns....

DATA	FREQUENCY
data	1
group	3
data initiative	1
government	2
agency	1
meetups	1
participation	1
share	1
practice	1
implementation	1
data applications	1
science communities	1
decision-makers	1
community interact	1
data science	1
order	1
advantage	1
data transformation	1

File - extract_s vo_dic

information	1
science	1
decision support	1
data discovery	1
data publishing	1
case	1
data publications	1
solution	1
technology	1
range	1
topic	1
keynote	1
panel discussion	1
data conference	1
summary	1
group meetups	1

31 . Design of a scalable data stream channel for big data processing

Verb-Object Pairs....

DATA	FREQUENCY
('outline', 'big data infrastructure')	1
('process', 'data streams')	1
('distribute', 'project')	1
('provide', 'stream computing platform')	1
('develop', 'stream computing platform')	1

Nouns....

DATA	FREQUENCY
paper	1
data infrastructure	1
data streams	1
project	1
stream	1
platform	1
data services	1
data stream management system	1
research	1
feasibility	1
data processing	1
computation	1

File - extract_s_vo_dic

32 . Gradient-based signatures for big multimedia data

Verb-Object Pairs....

DATA	FREQUENCY
------	-----------

('access', 'big multimedia data')	1
-----------------------------------	---

('provide', 'fast access complex multimedia data')	1
--	---

('epitomize', 'quality approximation multimedia objects')	1
---	---

Nouns....

DATA	FREQUENCY
------	-----------

increase	1
multimedia data	3
question	1
access	2
importance	1
order	1
feature	1
object	2
mean	1
model	1
signature	1
quality	1
approximation	1
indexing	1
query processing	1
scale	1

33 . Data confidentiality challenges in big data applications

Verb-Object Pairs....

DATA	FREQUENCY
------	-----------

('address', 'problem data confidentiality big data analytics')	1
--	---

('be', 'data confidentiality')	1
--------------------------------	---

('present', 'scheme')	1
-----------------------	---

('provide', 'provable secure data confidentiality')	1
---	---

('optimize', 'various techniques')	1
------------------------------------	---

('optimize', 'performance system')	2
------------------------------------	---

Nouns....

DATA	FREQUENCY
------	-----------

File - extract_s_vo_dic

paper	1
problem	1
data confidentiality	3
data analytics	1
field	1
pattern	1
machine	1
technique	2
data	2
scenario	1
prerequisite	1
scheme	1
secure data confidentiality	1
discus	1
performance	1
system	1

34 . Some key problems of data management in army data engineering based on big data

Verb-Object Pairs....

DATA	FREQUENCY
('analyze', 'challenges army data engineering big data volume heterogeneous') 1	
('discuss', 'disadvantages traditional management technologies') 1	
('highlight', 'key problems data management army data engineering') 1	

Nouns....

DATA	FREQUENCY
paper	1
challenge	1
data management	2
army data engineering	2
data volume	1
data	1
rate	1
data generation	1
update	1
time requirement	1
data processing	1
data sources	1
disadvantage	1
data management technologies	1
problem	2
data integration	1
data analysis	1
representation	1
data analysis results	1

File - extract_s_vo_dic

evaluation	1
data quality	1

35 . Linked Open Data mining for democratization of big data

Verb-Object Pairs....

DATA	FREQUENCY
('extract', 'knowledge')	1
('get', 'insights')	1
('make', 'decisions')	1
('present', 'infrastructure')	1
('allow', 'expert users')	1
('link', 'open data')	1
('be', 'main contribution paper')	1
('democratize', 'approach')	1
('reuse', 'approach')	1
('gain', 'knowledge')	1
('annotate', 'approach')	1
('base', 'work')	2
('deal', 'order')	1

Nouns....

DATA	FREQUENCY
data	4
user	2
order	2
knowledge	4
insight	1
decision	1
value	2
consumption	1
reusing	1
paper	2
infrastructure	1
i	1
data mining techniques	1
data sources	1

File - extract_s_vo_dic

ii	1
share results	1
lod	2
contribution	1
approach	1
data mining processes	1
work	1
viewpoint	1
diversity	1
data formats	1

36 . Pedigree-ing Your Big Data: Data-Driven Big Data Privacy in Distributed Environments

Verb-Object Pairs....

DATA	FREQUENCY
('introduce', 'general framework')	1
('support', 'management environments settings')	1
('view', 'framework')	1
('ensure', 'privacy big data')	1
('check', 'protocols')	2
('achieve', 'order')	1
('recognize', '" pedigree " suitable data representatives')	1
('provide', 'relevant realization provenance')	1
('privacypreserving', 'big multidimensional data framework')	1
('consider', 'multidimensional data')	1

Nouns....

DATA	FREQUENCY
paper	1
framework	4
data management	1
environment	1
setting	1
alternative	1
approach	2
privacy	2
data	2
protocol	2
layer	1

File - extract_s_vo_dic

order	1
overhead	2
process	1
challenge	1
data representatives	1
top	1
target	1
data repositories	1
checking	1
realization	1
aggregate-provenance privacypreserving	1
multidimensional data	1
driprom	1
case	1
interest	1

37 . Data science vs big data @ UTM big data centre

Verb-Object Pairs....

DATA	FREQUENCY
('hit', 'malaysia')	1
('address', 'industry')	1
('address', 'insight hindsight')	2
('address', 'challenges')	2
('address', 'academy communities')	1
('access', 'data')	1
('coin', 'phenomenon')	1
('address', 'big data')	1
('need', 'unique platform')	1
('require', 'three main personalities volume')	1
('need', 'new architecture techniques')	1
('uncover', 'golden knowledge information obesity')	1
('demonstrate', 'experiences')	1
('set', 'science big data platform')	1

Nouns....

File - extract_s_vo_dic

	FREQUENCY
DATA	1
data tsunami	1
malaysia	2
industry	2
community	2
insight	1
hind sight	1
challenge	1
world players	1
data information economy	1
decade	1
development	1
information	1
communication technology	1
ict	1
era	1
number	1
user	1
data keeps	1
time	1
phenomenon	1
data	3
asset	1
platform	1
behavior	2
datasets	1
size	1
ability	1
data storage	1
mine	1
personality	1
volume	1
velocity	1
variety	1
architecture	1
technique	1
algorithm	2
analytics	1
knowledge	1
information obesity	1
perspective	1
experience	1
data science/big data platform	1
tool	1
data plug	1
play	1
environment	1
service	1

File - extract_s_vo_dic

Verb-Object Pairs....	
DATA	FREQUENCY
('be', 'core governmental organization')	1
('be', 'data')	1
('consider', 'data quality dq')	1
('!penetrate', 'quality data')	1
('address', 'rules discovery dqr')	1
('propose', 'dqr discovery model')	1
('define', 'set processing activities')	1
('automatize', 'generation process')	1
('apply', 'rules optimization')	1
('show', 'increased quality scores')	1
Nouns....	
DATA	FREQUENCY
data era	1
data	3
core	1
organization	1
effort	1
towards	1
insight	1
quality	2
data quality	1
dq	1
element	1
data processing phase	1
stage	1
quality data	1
data value chain	1
paper	1
data quality rules	1
dqr	2
evaluation	1
data pre-processing	1
dqr discovery model	1
activity	3
quality requirements	1
set	1
data quality dimensions	1
dqd	1
dqr generation process	1
rules optimization	1

File - extract_s_vo_dic

rule	2
eliminates	1
experiment	1
quality scores	1

39 . A big data analytics framework for forecasting rare customer complaints: A use case of predicting MA members' complaints to CMS

Verb-Object Pairs....

DATA	FREQUENCY
('publish', 'part c star ratings')	1
('be', 'one key measures')	1
('track', 'complaints')	1
('be', 'challenging task')	1
('construct', 'big analytics framework')	1
('forecast', 'rare customer complaints')	1
('build', 'big ingestion pipelines')	1
('design', 'unique decision tree')	1
('base', 'large ensemble leos algorithm forest')	1
('increase', 'bias')	1
('validate', 'framework')	1
('learn', 'algorithm')	1
('handle', 'data')	1
('apply', 'findings')	1

Nouns....

DATA	FREQUENCY
center	1
medicare	1
medicaid services	1
cm	1
publishes	1
part c star ratings	1
year	4
quality	1
care	1

File - extract_s_vo_dic

medicare advantage	1
contract	1
measure	1
complaint	6
health plan	2
module	1
ctm	3
event	1
ma contracts	1
star ratings	1
number	2
member	6
.10	1
plan	2
reimbursement	1
forecasting	1
task	1
ethics considerations	1
patient	1
right	1
privacy	1
research	2
data analytics framework	1
customer complaints	1
data ingestion pipelines	1
platform	1
ma plan	1
customer complaints data	1
b	1
call center data	1
data	5
text script	1
call	1
c	1
claim	1
demographic	1
history	1
d	1
pharmacy claims	1
e	1
integrate	1
source	1
feature	1
table	1
row	1
analysis	1
modeling	1
decision tree	1
algorithm	2
forest	1
oversampling	1
target class	1
bias	1
computing	1

File - extract_s_vo_dic

hadoop clusters	1
thousand	1
size training data sets	1
dataset	1
decision trees	1
structure	1
framework	1
leo	1
ethics issues	1
finding	1

40 . Big data gathering and mining pipelines for CRM using open-source

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'sector enterprise software')	1
('use', 'data mining primitives')	1
('rival', 'database rdbms stacks')	1
('enrich', 'source stack')	1
('have', 'choice')	1
('power', 'big data applications')	2
('!are', 'studies enterprise big data pipelines')	1
('use', 'source components')	1
('support', 'crm')	1
('process', 'data')	1
('analyze', 'data')	1
('analyze', 'specific questions')	1
('answer', 'questions large scale')	1
('serve', 'crm pipeline')	1
('incorporate', 'data mining')	1
('serve', 'several applications')	1
('have', 'two parts')	1
('be', 'part')	1

('use', 'kafka storm')	1
('be', 'mining part')	1
('use', 'mahout')	1
('provide', 'timings common tasks')	1
 Nouns....	
DATA	FREQUENCY
customer relationship management	1
crm	2
sector	1
enterprise software	1
worldwide	1
crm technologies	1
data mining primitives	1
application	2
time	1
growth	1
data	3
evolution	1
source	1
data software stack	1
apache software	1
enterprise database	1
rdbms	1
stack	2
technology	2
kafka	2
storm	2
hbase	2
source stack	1
hadoop mapreduce	2
mahout	2
today	1
enterprise	3
choice	1
power	1
data applications	1
study	1
literature	1
data pipelines	1
source components	1
question	2
pipeline	3
building blocks	1
step	1
work	1
scale	1
customer	1
crm pipeline	1

File - extract_s_vo_dic

data mining	1
part	2
data gathering part	1
data mining part	1
timing	1
task	1
machine learning	1
reservoir sampling	1
itemset extraction	1

41 . Digital construction of coal mine big data for different platforms based on life cycle

Verb-Object Pairs....

DATA	FREQUENCY
('be', 'basis')	1
('become', 'important focus big data innovation')	1
('be', 'core big data')	1

Nouns....

DATA	FREQUENCY
data	5
industry	1
business functions	1
factor	1
production	1
economy	1
data technology system	1
data collection	1
basis	1
storage	2
analysis	1
integration	1
visualization	1
focus	1
data innovation	1
core	1
life cycle theory	1
technology	1
acquisition	1
processing	1
organization	1
copyright protection	1
cluster	1
concurrency retrieval	1
scheduling	1
display	1

File - extract_s_vo_dic

coal mine industry information data	1
management	1
retrieval	1
exhibition	1
information resources	1
mean	2
reference	1
construction	1
coal mine information data	1
data thinking	1

42 . A novel big-data processing framework for healthcare applications:
Big-data-healthcare-in-a-box

Verb-Object Pairs....

DATA	FREQUENCY
('present', 'novel data framework healthcare applications')	1
('benefit', 'areas identified')	1
('build', 'novel approach')	1
('adapt', 'data framework')	1

Nouns....

DATA	FREQUENCY
herein	1
big-data framework	1
healthcare applications	2
healthcare data	1
bigdata processing	1
analytics	1
variety	1
veracity	1
volume	1
type	2
data	1
time	1
area	1
healthcare	1
treatment	1
architecture	1
approach	1
framework	1
use	1
"	1

43 . Data quality assessment for on-line monitoring and measuring system of power quality based on big data and data provenance theory

Verb-Object Pairs....

DATA	FREQUENCY
('accumulate', 'huge amount data')	1
('face', 'big application problems')	1
('propose', 'system method monitoring')	1
('assess', 'integrity redundancy')	1
('provide', 'strong data support big data application power quality')	1

Nouns....

DATA	FREQUENCY
monitoring	3
system	4
power quality	4
amount	1
data	5
age	1
data application problems	1
paper	1
data quality assessment system method	1
data provenance	1
integrity	1
redundancy	1
accuracy	1
timeliness	1
intelligence	1
consistency	1
data set	1
assessment rule	1
situation	1
data quality problems	1
data support	1
data application	1

44 . Research on analysis system of city price based on big data

Verb-Object Pairs....

DATA	FREQUENCY
('construct', 'analysis model city price')	1
('include', 'layer')	1

('support', 'layer')	1
('show', 'layer')	1
('include', 'data collection management')	1
('use', 'technological tools data mining computing')	1
('build', 'order')	1

Nouns....

DATA	FREQUENCY
paper	2
analysis model	1
city price	3
data system	1
information	1
reference	1
government	1
policy	1
price control	1
analysis system	1
layer	3
level	1
transmission path	1
data collection	1
data management	1
data mining	2
decision making	1
safety protection	1
construction	1
subsystem	1
tool	1
cloud computing	1
visualization	1
order	1
data acquisition subsystem	1
data management subsystem	1
data analysis subsystem	1
data transmission subsystem	1
description	1
path	1
time	1

45 . An OWL Ontology for Supporting Semantic Services in Big Data Platforms

Verb-Object Pairs....

DATA	FREQUENCY
------	-----------

('be', 'interest use big data models')	1
('support', 'analysis functionalities')	1
('lack', 'expertise')	2
('lack', 'adequate budget')	2
('fill', 'order')	1
('compose', 'model')	1
('select', 'model')	1
('base', 'deployable set services')	1
('shape', 'set user preferences')	1
('carry', 'selection services')	1
('propose', 'owl ontology')	1
('solve', 'issue')	1

Nouns....

DATA	FREQUENCY
year	1
interest	1
use	1
data models	1
data analysis functionalities	1
company	1
organization	1
expertise	1
budget	1
benefit	1
order	2
gap	1
approach	1
data analytics-as-a-service	1
mbdaaas	1
model	2
declarative	1
deployment	2
sub	1
set	2
service	2
preference	1
data campaign	1
bdc	2
selection	1
basis	1

File - extract_s_vo_dic

coherent	1
user preferences	1
paper	1
owl ontology	1
issue	1

46 . Big data analysis of youth tobacco smoking trends in the United States

Verb-Object Pairs....

DATA	FREQUENCY
('generate', 'large amounts data')	1
('process', 'big data technologies')	1
('explore', 'big data techniques r')	1
('explore', 'tobacco smoking trends among youth united states')	1
('be', 'number youth female smokers')	1
('quit', 'smoking')	1

Nouns....

DATA	FREQUENCY
amount	1
data	2
healthcare industry	1
data technologies	1
tobacco smoking	1
youth	2
state	2
research	1
data techniques	1
r	1
tableau	1
tobacco	1
trend	1
result	2
number	1
male smokers	1
smoker	1
percent	1
youth smokers	1
smoking	1

File - extract_s_vo_dic

47 . Meta-analysis of big data security and privacy: Scholarly literature gaps

Verb-Object Pairs....

DATA	FREQUENCY
('study', 'topics')	2
('focus', 'topics')	2
('focus', 'much literature')	2
('approximate', 'weibull distribution')	1
('capture', '82 % variance p<.01')	1
('be', '13 dominant topics')	1
('capture', '49 % big data production journals')	1
('stimulate', 'big security research')	1

Nouns....

DATA	FREQUENCY
article	1
data	1
topic	2
literature	1
privacy	2
keywords	1
analysis	1
data paradigm	1
research production	1
distribution	1
%	4
variance	1
<	1
data production	1
journal	1
security topics	1
trend	1
data privacy-security research	1

48 . Where big data meets linked data: Applying standard data models to environmental data streams

Verb-Object Pairs....

DATA	FREQUENCY
('deploy', 'new seafloor observatory')	1

('connect', 'sensors observatory platform')	2
('allow', 'broadband connection')	1
('involve', 'development aspect')	1
('take', 'advantage')	1
('stream', 'marine data')	1
('end', 'user')	1
('offer', 'suggestions')	1
('standardise', 'data streams')	1

Nouns....

DATA	FREQUENCY
observatory	1
galway bay	1
ireland	1
sensor	1
observatory platform	1
cable	1
shore station	1
broadband connection	1
data transfer	1
marine institute	1
data centre	1
setup	1
development	1
data acquisition system	1
advantage	1
source	1
data solutions	1
response	1
data paradigm	1
velocity aspect	1
activity	1
concept	1
arena	1
data	1
internet	1
thing	1
data standardisation	1
paper	1
architecture	1
marine data	1
instrument	1
user	1
suggestion	1
data streams	1

49 . An iterative methodology for big data management, analysis and visualization

Verb-Object Pairs....

DATA	FREQUENCY
('constitute', 'opportunity')	1
('empower', 'analysis')	1
('!is', 'standard way')	1
('approach', 'big data projects')	1
('fail', 'return investment')	1
('obtain', 'return investment')	2
('present', 'methodology')	1
('review', 'state art')	1
('surround', 'big data projects practices')	1
('apply', 'techniques')	1
('combine', 'techniques')	1
('tackle', 'order')	1
('identify', 'problems')	1
('increase', 'problems')	2

Nouns....

DATA	FREQUENCY
data	2
opportunity	1
company	1
analysis	1
moment	1
way	2
data projects	5
nature	1
cause	1
return	1
investment	1
paper	1
methodology	2

File - extract_s_vo_dic

problem	3
end	1
state	1
art	1
practice	1
method	1
step	2
technique	1
order	1
success rate	1

50 . Big data analytics platform for flight safety monitoring

Verb-Object Pairs....

DATA	FREQUENCY
('meet', 'many bottlenecks')	1
('analyze', 'insufficiencies preliminary business process airline')	1
('avoid', 'meeting requirements')	1
('utilize', 'monitoring platform')	1
('propose', 'architectural framework monitoring platform')	2
('demonstrate', 'architectural framework monitoring platform')	2

Nouns....

DATA	FREQUENCY
method	1
data analytics	1
flight safety monitoring	1
bottleneck	1
paper	1
insufficiency	1
business process	1
airline	1
purpose	1
meeting requirements	1
efficiency	1
accuracy	1
drawback	1
framework	1
flight safety monitoring platform	1
data technology	1
function module structure	1
structure	1
platform	1
system	1

File - extract_s vo_dic

subsystem	1
acquisition	1
data decoding	1
data storage	1
data analysis	1
visualization	1

Process finished with exit code 0