# **Assignment 3: Overview of a Research Project**

## **Project titles (topics) completed**

#### 2012

A comparison of P2P files sharing models on efficiency and traffic

A comparison of replica placement strategies in distributed storage systems

A hierarchical ontology scheme for organizing Chinese social website tags

An intelligent video surveillance system based on Android platform

Analysis of unified power quality conditioner and research on its control strategy

Choosing an image enhancement algorithm for pre-processing a business card

Constructing a comprehensive knowledge base from DBpedia

Design and implementation of a distributed intelligent video surveillance system based on Android phone

Evaluating loan applicants using neural networks

Feasibility of VANET and its routing protocols

Implementation of face detection system on DSP platform

Overview of dynamic reactive power compensation

Ranked query review and optimization

Regularized back-propagation neural network for river discharge prediction

WiMAX versus LTE: Which one will lead the next generation mobile network?

### 2013

A personalized recommender system based on a hybrid recommendation algorithm

A semantic relatedness measurement between terms based on folksonomies

Anonymization approaches for privacy-preserving data publishing

Application of streaming media compression algorithms in 3G wireless networks

Building Chinese linking open data

Cloud computing security requirements and threats

Data extraction and feature recognition of geometric entities base on DXF files

Effective car classification using neural networks

Effective measures to improve the performance of wireless mesh networks

Machine learning and wireless network in the application of object recognition and detection

Predicting diabetes mellitus using neural networks

Routing in pocket switched networks

Simulation study on the interference between TDLTE and LTE-FDD

Social information extraction using probabilistic topic model

# **Assignment 3: Overview of a Research Project**

## **Project titles (topics) completed**

#### 2014

A comparison between two web data extraction methods

A delay reduced design for mobile video chat applications

A movie recommender system using knowledge bases

A new resampling method for particle filter localization

A primary research on mobile communication and network fusion

An easier way to build and maintain big-data analytics

An eye location method

An efficient RDF store schema over a relational database

An overview of bank marketing forecast based on neural networks

Broadcast protocols used in wireless VANET networks

Classifying abalone shellfish

Combining neural networks and financial indices to predict the stock trend in China

Comparison between two web data extraction methods

Design and implementation of a distributed storage performance test system

Design of gesture recognition system for human-machine interaction

Directing marketing campaigns of banking institutions

Evaluating the quality of red wine based on physicochemical tests

Gaining insight from complex datasets with visual analytics

Improving customer relationship management using data mining

Incorporating financial indices into neural networks to predict the stock trend in China

Information extraction using Datalog

Prediction of wine quality based on classification and clustering algorithms

Social based recommendation with enhanced self-adaptation ability

Techniques of Internet traffic classification

White wine quality certification using neural networks

# **Assignment 3: Overview of a Research Project**

## **Project titles (topics) completed**

### 2015

A data-driven approach to predict the success of bank telemarketing using neural networks

A new model for social networks

Designing a secure barcode-based visible light communication for smart devices

Effective ways to ensure customer privacy in e-commerce

Entity recognition and disambiguation systems

Face recognition based on BP neural networks and K-nearest comprehensive decisions

Flexible task allocation in participatory sensing with smart phones

Improving efficient search in big data

Lexical dictionary-based sentence alignment and an improvement

Linking entities with knowledge bases

Mechanisms and limitations of distributed computing models

Mining type information from Chinese online encyclopaedia

Optimization models for power plant equipment location

Predicting duotone ball lottery using GA-BP neural networks

Probabilistic concept models

Social network assisted device-to-device communication

Software defined networks: A new architecture for modern networks

Virtual machine placement in data centers

Wearable technology in healthcare with a remote medical system

# **Assignment 3: Overview of a Research Project**

## **Project titles (topics) completed**

#### 2016

A combination of neural networks and matrix factorization in recommender systems

A generic solution to judge the performance of paraphrasing models and domain-general logical forms for semantic parsing

A new solution of single point of failure for HDFS

Addressing cloud computing security issues

An application of data mining in building intelligent transportation systems

An application of the neural network model on diagnosis of hepatitis

An improved cloud computing framework

An improved hybrid scheme for gesture segmentation

Artificial neural networks in fruit classification

Anchor links prediction problems for heterogeneous social networks

Building an NN model with the best training efficiency on an acceptable accuracy

Click fraud detection

Classifying the reason for elevator accidents with neural networks and decision trees

Semantic data mining using RDF hypergraphs

Text classification through Bayes' theorem

Web page segmentation

# Assignment 3: Overview of a Research Project

# **Project titles (topics) completed**

### 2017

A review of word alignment techniques

A SNS-based movie recommender system

An application of neural network models to fingerprint recognition

An application of sentiment analysis in e-commerce evaluation systems

An efficient method of license plate localization under complex background

An improved approach for face recognition

Capture the breath: some methods to detect the respiration rate

Deep reinforcement learning towards games

Detecting the onion network traffic in meek mode using SVM

Feature selection of machine learning on cardiovascular disease detection

N-ary relations mining

Prediction of resource demand for large scale graph data processing in cloud environments

Semi-supervised label distribution learning for facial age estimation

SQL injection attack detection using fuzzy logic and naïve Bayes

Stock trading with deep reinforcement learning

Type inference on noisy linked data

Understanding the difficulty of training deep neural networks and some solutions

Web page classification based on content extraction