北京邮电大学
本科毕业设计（论文）任务书
Project Specification Form

学院 School	International Schoo	**专业 Programme**	Telecommunications	**班级Class**	2012215104
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设计（论文）编号 Project No.	RN_2860				
设计（论文）题目 Project Title	User behavior analysis based on DPI(Deep Packet Inspection)				
论文题目（中文）	基于深度包检测的用户行为分析				
题目分类 Scope	Research	Networks	Simulation		

主要任务及目标Main tasks and target：	By
Task 1: Understand the principle of deep packet inspection	30 December 2015
Task 2: Analysis of the open source code--NDPI	01 March 2016
Task 3: Analysis of user behavior and habits based-on the captured packets	01 May 2016
Task 4:	null

Measurable outcomes
1) The NDPI platform deployment and testing
2) Real-time grasping the Internet packets and analyzes the protocol type
3) Programming realization of user behavior analysis system

主要内容Project description：

DPI is a software solution that monitors a network's data stream and identifies protocols and applications, inappropriate URLs, intrusion attempts and malware by looking deep into data packets. DPI provides important security and translation functions by inspecting incoming packets, reassembling and decompressing them, analyzing the code and passing data to appropriate applications and services.We can analyze the user behavior and habits by DPI.

Project outline

Handle NDPI working structure;
Deeply inspect all layers of the packet with NDPI source code in C;
Program to implement reorganization of packets and data stream;
Grasp real-time Internet packets by NDPI and write condition to filter out the useless packets;
Focus on research and analysis on HTTP message in application layer and gain the useful information for user behavior analysis;
Store user information and behavior-related factors (e.g. IP, URL, timestamp and accessing page content) into MySQL database;
Conduct simple statistical analysis and data mining on user behavior details;
Program front-end platform to generate user portrait, for querying every user's access behavior details and regional integrated situation;
Organized results and write paper.

Fill in the sub-tasks and select the cells to show the extent of each task

	Nov		Dec		Jan		Feb		Mar		Apr		May	
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