**Final Project - Team, Title, Plan, Github**

**Team**

Name: WMW (initials of our first names)

Member: Wenting Su, Mohan Liu, Wei Huang

**Topic/Idea**

Title: Artificial Neural Network to solve Customer Churn Problem

Idea: Customer Relationship Management (CRM) is a key element of modern marketing strategies. KDD Cup 2009 offered the opportunity to work on large marketing databases from Orange, the French Telecom company, to predict the propensity of customers to switch provider (churn), buy new products/services (appetency), or buy upgrades/add-ons proposed to them to make the sale more profitable (upselling). We plan to make an Artificial Neural Network to predict Customer Churn.

Data: two datasets are provided, a small and a large, each of them has 50,000 instances. For each instance, the small dataset has 230 attributes and the large has 15,000 attributes. Our initial plan is to work on the small dataset while using methodologies and techniques that scales up to the large dataset. If the time allows, we will try to work on the large dataset after we succeed on the small one.

Reference: <http://www.kdd.org/kdd-cup/view/kdd-cup-2009/Intro>

**Plan**

Data processing – Wenting (Primary), Mohan, Wei

Our current plan is to utilize MapReduce for data preprocessing for scalability. Code in java.

*DDL Apr. 15*

Machine learning (ANN) – Wei (Primary), Wenting, Mohann

We plan to utilize Tensor Flow in our ANN training. Code in python.

*DDL Apr. 21*

Presentation preparation – Mohan (Primary), Wenting, Wei

*DDL Apr. 23*

**Github link of shared team repository**

<https://github.com/wadehuangwei/INFO7250-Final>