

## Authorship Detection

Minutes for 4<sup>th</sup> meeting of 09/08/2010

Held in Innova21 inside office, 3:02 pm – 3.50 am

Participants: Clement, Joel, Jie Dong, Derek, Brian, Matthew, Maryam,

Absent: None

### Minutes

#### 1. Project status/progress during last week

- a) Done on comparison of different data conversion and classification.
- b) WBS is roughly done.
- c) Matthew:
  - a. Get java and matlab working for SVM
  - b. Use default test files
  - c. Try reproduce Talis data
  - d. Get train data, test data, check if is correct, test on known author
- d) The classification in SVM is similar to LDA
- e) SVM can handle non-linearity.
- f) Put in train data, it comes out as math function (not sure about this)
- g) Block diagram of flow of data in SVM
- h) 3 methods use: WRI, word frequency, and Trigram Markov (featured vector)
- i) Applications:
  - a. New search engine
    - i. not by keyword, but put entire document and find similar document
    - ii. any document written by same author
  - b. plagiarism in music
  - c. comparing software version-control
- j) need 1 slides on risk, budget and work hazard
- k) can test by chop half, train first half, then feed 2<sup>nd</sup> half of known author
- l) TALIS DID NOT USE SVM, he uses WRI, Markov and MDA (multidimensional Discriminant analysis)

#### 2. Project goals for upcoming week

- a) Need slide on work hazard and risk
- b) Get flow chart on data flow
- c) Do a brief introduction slide on the 3 technique use

#### 3. Individual reports

- a) Joel:
  - a. Do milestone and budget for power point
  - b. Do work hazard and risk slides
  - c. Study on controversial things (Federalist Paper, Shakespeare, bible, and book of Mormon)
- b) Dong Jie:
  - a. Do flow chart of data
  - b. Study on SVM
  - c. Later on focus on matlab of SVM
- c) Clement:

- a. Do the slides on 3 technique use (WRI, trigram Markov, and word frequency)
- b. Study SVM for java