## **Author Profiling**

Borna Sirovica, Filip Zelić, Ivan-Dominik Ljubičić

Fakultet elektrotehnike i računarstva

June 13, 2016

### Content

- Project topic
- 2 Dataset
- 3 Preprocessing
- Feature extraction
- 5 Supervised learning model
- 6 Results

2 / 14

# **Author Profiling**

- Identifying information about an author by analyzing their writing style
- Distinguishes between classes of authors studying their sociolect aspect
- Growing importance in forensics, security, marketing, and social networks



### Our task

- Predicting author profiling aspects
  - Demographics (Classification)
    - age
    - gender
  - Big Five personality traits (Regression)
    - extroversion
    - stability
    - agreeableness
    - conscientiousness
    - openness

#### **Dataset**

- English tweets dataset from PAN 2015 competition
  - XML format, 152 users
  - Age and gender labels
    - 18-24, 25-34 34-49, 50+
    - M, F
  - Personality traits
    - normalized numeric rating in [-0.5,0.5] range

# Preprocessing

- Creating a document of tweets for each user
- Cleaning tweets from
  - XML tags
  - hashtags
  - @mentions
  - URLs
  - dupicates

#### **Features**

• Ovdje opisati što o featurima

### Feature extraction

# Models

### Model selection

Odabri modela.

### Results

Rezultati.

# **Implementation**

- Python Python
- Sklearn Sklearn

### Conclusion

• Zaključak rada.

### End

Thank you for attention.

Questions, comments ?