Aishwarya N. Reganti

PERSONAL DETAILS

Birth	November 22,1996
Phone	+91-9986016788
e-mail	aishwarya.r14@iiits.in
Studying at	Indian Institute of Information Technology-Chittoor,Sricity
Course	B.Tech in Electronics and Communication Engineering (2014-18)

ACADEMIC ACHIEVEMENTS

Performance in Under-graduate Program 2014-15

- Scored a cgpa of 9.64 till 4th Semester B.tech (Electronics and Communication Engineering) IIIT-Chittoor, Sricity, India

Performance in CBSE 10th and Karnataka P.U.C 2010-2014

- Scored a cgpa of 10/10 in CBSE 10th standard and an aggregate of 95% in Karnataka Pre University Board

INTERNSHIPS

Research Assistant: Nanyang Technological University, Singapore Summer-2016

- Worked as Research Assistant in NTU-Singapore for SenticNet under the guidance of Prof.Erik Cambria.
- Developed a model for automatic satire detection in English text.
- Worked on detection of various elements of figurative language (Metaphor, Sarcasm, Humor & Irony) in English text using Convolutional Neural Networks (CNN) .

PUBLICATIONS

A Societal Sentiment Analysis: Predicting the Values and Ethics of Individuals by Analysing Social Media Content [Communicated] 2016

The paper reports work on investigating a psycholinguistic model of societal sentiment, the Schwartz' model, and applying it to social media text. The analysis is based on corpora that we have collected both from social media (Facebook, Twitter) and from user essays, in order to find out how a user's social media behaviour or language is related to his/her ethical practices. Several experiments have been carried out on the corpora in order to automatically classify the ethical values of a user, incorporating Linguistic Inquiry Word Count analysis, n-grams, topic models, psycholinguistic lexica, speech-acts, and non-linguistic features, while experimenting with a range of machine learning algorithms

(Support Vector Machines, Logistic Regression, and Random Forests) to identify the best linguistic and non-linguistic features for automatic classification of values and ethics.

Modeling satire in English text for Automatic detection [Communicated] 2016

Satire is an important language aspect used in everyday communication, the study of satire detection in natural text is often ignored. In this paper, we identify key value components and features for automatic satire detection. Our experiments have been carried out on three data sets, namely, tweets, product reviews and newswire articles. We examine the impact of a number of state of the art features as well as new generalized textual features. Together using these features, we outperform the state of the art by a significant 2-6% margin.

Revealing Psycholinguistic Dimensions of Communities in Social Networks using Personality and Values Models [Communicated] 2016

Detecting and analyzing communities from social networks has attracted immense attention over the last decade. However, the semantic interpretation of a community is hardly studied. In our paper, we have attempted to understand whether individuals in a community possess similar Personalities, Values and Ethical background. We designed a three-fold experimental setup, proposed automatic models to determine Personality, Values and Ethics (Values henceforth) of individuals by analyzing their language usage and behavior in social media. Various experiments were performed to understand the characteristics or blend of characteristics of individuals within a community. Finally, we showed that the detected Personality and Values of individuals can be used further as additional node attributes to detect better community structure.

Cosmopolitan Mumbai, Orthodox Delhi, Techcity Bangalore: The Creation of India's Geo-Specific Ethical Map from Social Media [Communicated] 2016

The paper reports work on investigating societal sentiment using the Schwartz values and ethics model, and applying it to social media text of users from 20 most populous cities of India to represent geo-specific societal sentiment map of India. For the automatic detection of societal sentiment we propose psycho-linguistic analysis, that reveals how a user's social media behavior and language is related to his/her ethical practices. India is a multi-cultural country, values and ethics of each Indian are highly diverse and dependent on the region or society s/he belongs to. Several experiments were carried out incorporating Linguistic Inquiry Word Count analysis, n-grams, topic modeling, psycholinguistic lexica, speech-acts, and non-linguistic features, while experimenting with a range of machine learning algorithms including Support Vector Machines, Logistic Regression, and Random Forests to identify the best linguistic and non-linguistic features for automatic classification of values and ethics.

NOTABLE PROJECTS

Sentiment Analysis of Code-Mixed text 2016-Present

Sentiment Analysis seeks to identify the opinions and viewpoints communicated in a given piece of data which is generally in the form of text. In the recent years, there have been many attempts to classify texts from various sources based on their polarity. However, a major challenge in analyzing textual data is Code-Mixing. Especially, in a multilingual country like India where about 22 official languages exist, Code-Mixing is very prominent. For example, many native languages are Code-Mixed in English script. In this project, we attempt provide a sentiment analysis of Telugu, Tamil and Hindi social media textual content obtained from various kind of social media sources like Twitter, Facebook e.t.c. The model will classify a given text into positive, negative and neutral.

Shallow Parsing of Code-Mixed text 2016-Present

In this project, we attempt to develop a Shallow parser for Code-Mixed social media text. Dependency parsing is the linguistic technique to identify dependent relations between textual components in a given natural language sentence. Parsing is a a well studied paradigm for monolingual formal text whereas linguistic research on code-mixing multilingual text is new research strand altogether. Our current endeavor includes English-Hindi and English-Telugu parser development.

Personality Detection from Social Network Profiles 2015-Present

According to statistics Facebook is the 2nd most popular and Twitter is the 10th most popular website now! Probably the meaning space of social-status and Facebook/Twitter status is coming closer day by day. There could be a perpetual debate on whether digital representations of us on Facebook/Twitter can capture much about human social relations, but the increasing popularity of these sites and data made urgency to develop technology to manage this information more intelligently than ever. With that necessity in mind the goal of my present research is to assess personality(Openness (O),Conscientiousness (C), Extraversion (E), Agreeableness (A), Neuroticism (N)called Big Five Model)of any user from his/her Facebook/Twitter interactions.

Values/Personality Community World Map 2016-Present

To understand how someone's personality and intrinsic values change with geolocation and city we will perform several experiments, the final outcome of which will be a map to represent geo-specific values.In order to create the World map, we intend to collect data from 40 most popular cities around the world. We will also be collecting the network structure of atleast 2000 users from each city and determine the Values and Personality and checking community Variations all over the world. This values/ethics map would provide an overview of the kind of values & Personalities possessed by people from different regions and community structure.

Web Portal for University Hostel 2015

Developed a Hostel portal for the University to facilitate hostelers using web2py framework and SQLite database. User Interface was developed using Java-Script, HTML and bootstrap

Home Automation System with user Face Recognition 2015

Devised a Home Automation System which validates user on the basis of face recognition

Quad Control Robotic Arm for Assistance of Physically Challenged(Android-Based) 2015

Developed a prototype Robotic Arm for assisting aged and Physically Challenged people. The Arm uses Wi-Fi and Bluetooth as communication networks and works on four control mechanisms i.e., Remote, Smart Phone Tilt, Voice and Hand gesture recognition. User Interface is provided by self developed Android Application

SKILLS

Languages	Telugu (mother tongue) English (fluent),Hindi Hindi (fluent) Kannada (fluent) Tamil (fluent)
Software	JAVA, WEB2PY, PHP, SQL, C++, HTML-5, PYTHON, C

REFERENCES

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