

Progress report

Center of Excellence in Big Data Engineering

March 2018

Abstract

The idea of Co-creation of Center of Excellence in Big Data Engineering was initiated between IIIT Bangalore and City University, United Kingdom. The set of activities as a part of the initiative are co-creation of academic curricula in Big Data Engineering, conduct a workshop for tier 2, tier 3 institutions in India and involve representatives from City College in the workshop, create a course curriculum and teach in respective institutions and support specific research projects in Big Data. The progress is presented in this report. The set of tasks to be performed is also listed below.

1 Progress

1. Prof. Srinath Srinivasa is visiting Web Science Institute, University of Southampton to discuss the progress of Web Observatory project and look for other opportunities for research collaboration.

1.1 Progress of Open city project

- (a) Rails application Dockerization using mysql 5.7 (to support JSON)
- (b) Init function created for new UoD, Authentication of new users, Theme integration to facilitate easier view creation, Created model relations, scaffoldings
- (c) Templates for role and privilege table using JSON data type, Upload and download resources
- (d) Automatic world creation for new user linked to him/her
- (e) Admin Functionality for world Implemented
- (f) Integration with blockchain logging application both query and logging

1.2 Progress of Web Observatory Project

- (a) Raksha P S presented a demo paper titled "Mithya: A Framework For Identifying Opinion Drivers On Social Media" in the ACM IKDD Conference on Data Science and International Conference on Management of Data, Goa, India, from 11-13 Jan 2018 (CODS-COMAD 2018).
- (b) Raksha P S presented a talk titled "Identifying Narratives on Social Media" and a poster as a part of PhD Colloquium at Research, Innovation, Society and Entrepreneurship (RISE) @ IIIT-B on 16 Feb 2018.
- (c) Implementation of model for Identifying Narratives on Social Media is finished and evaluation of results is going on currently.
- (d) Anish Pal, Mtech student is working on integrating Narrative identification part in to the existing web portal call MITHYA, which can be accessed at <http://webobservatory.iiitb.ac.in:8080/driveridentification/>

2 Tasks to be performed

1. To finalize on the potential partners and make progress in the collaboration.

2.1 Next steps for web observatory project

- (a) Submit the work on Identifying Narratives on Social media in an international conference.
- (b) Work on integration of previous work "Identifying Opinion Drivers on Social Media" and the current work of "Identifying Narratives on Social Media" and form a model to identify Signature of a trending topic on social media.
- (c) Develop the theory of modeling the social cognition on social media as a Marketplace of Opinions.

2.2 Next steps for Open City project

- (a) Enhancing the current UI to make a seamless user experience when there are a huge number of worlds and resources.
- (b) Deciding on including more roles and privileges and actions corresponding to them.
- (c) Working with larger amount of data and resources and modelling their flow.
- (d) Deciding workflow when a single word holds multiple roles in another world.
- (e) Semantic Flow of data and world interaction logic.