Shubhanshu Mishra

101 N Busey Ave, Apt 6, Urbana, Illinois 61801, USA smishra8@illinois.edu ◆ +1 (217) 721-8520 ◆ http://shubhanshu.com/

EDUCATION

University of Illinois at Urbana-Champaign, Urbana-Champaign, Illinois, USA

Doctor of Philosophy (Ph.D.) in School of Information Sciences

Aug 2013 -

Advisors: Jana Diesner & Vetle Torvik

Working on thesis titled: Information extraction from digital social trace data: applications in social media and scholarly data analysis

Research areas: Data Mining, Social Network Analysis, Machine Learning

Cumulative GPA: 3.86 / 4.0

Indian Institute of Technology, Kharagpur, India

Bachelor of Science (B.S.) in Mathematics and Computing

Jul 2007 - Jul 2010

Master of Science (M.S.) in Mathematics and Computing

Jul 2010 – May 2012

Graduated with College Honors. Cumulative GPA: 7.29 / 10.0

Coursera Oct 2012 –

Courses: Machine Learning, Social Network Analysis, Social and Economic Networks, Introduction to Data Science, Model Thinking

PEER REVIEWED PUBLICATIONS

<u>Mishra S</u>, Fegley BD, Diesner J, and Torvik VI. "Expertise as an aspect of author contributions" in *METRICS 2018: ASIS&T workshop on informetrics and scientometrics research* 2018 (to appear) <u>Mishra S</u>, Fegley BD, Diesner J, and Torvik VI. "Self-Citation is the Hallmark of Productive Authors, of Any Gender" in *PLoS One* 2018 (to appear)

<u>Mishra S</u>, and Diesner J. "Detecting the correlation between sentiment and user- as well as text-level meta-data from benchmark corpora" in *HyperText* 2018

<u>Mishra S</u>, Lee H, Kim J, Torvik VI, and Diesner J. "Construction of hierarchical subject headings for computer science and their application to studying temporal trends in scholarly literature" in *IC*2S2 2018

Addawood A, Rezapour R, <u>Mishra S</u>, Schneider J, and Diesner J. "Developing an Information Source Lexicon" in *NIPS Workshop on Prioritising Online Content* Dec 2017

Collier DA, <u>Mishra S</u>, Houston DA, Hensley BO, and Hartlep ND."Americans 'support' the Idea of Tuition-Free College: An Exploration of Sentiment and Political Identity Signals Otherwise." in *Journal of Further and Higher Education*. Sep 2017

<u>Mishra S</u> and Diesner J, "Semi-supervised Named Entity Recognition in noisy-text", in *2nd Workshop on Noisy User-generated Text (W-NUT) at COLING 2016*. Dec 2016

<u>Mishra S</u> and Torvik VI, "Quantifying Conceptual Novelty in the Biomedical Literature", in *D-Lib Magazine* (also presented at WoSP workshop, JCDL 2016). Sep 2016

<u>Mishra S</u>, Diesner J, Byrne J, and Surbeck E, "Sentiment Analysis with Incremental Human-in-the-Loop Learning and Lexical Resource Customization", in *ACM Hypertext*, Cyprus, Turkey. 2015

Mishra S, Phelps K, Agarwal S, Picco J, Guo J, Diesner J, "Enthusiasm and Support: Alternative Sentiment Classification for Social Movements on Social Media", in *ACM Web Science*, Blomington, IN. 2014

Diesner J, Aleyasen A, Mishra S, Schecter A, Contractor N, "Comparison of Communication Networks built from explicit and implicit data", in *Computational Approaches to Social Modeling (ChASM 2014)*, Blomington, IN. 2014

Agarwal S, <u>Mishra S</u>, Guo J, Phelps K, Picco J, "SentiNets: User Classification Based on Sentiment for Social Causes within a Twitter Network", at *iConference*, Berlin, Germany 2014

Wilner S, <u>Mishra S</u>, Aleyasen A, Soltani S, Diesner J, "Comparison of Network Data Constructed from Bodies and Meta Data of Text Corpora", at *Sunbelt*, St. Petersburg, FL 2014 [Presentation]

Diesner J, Aleyasen A, Kim J, <u>Mishra S</u>, Soltani S, "Using Socio-Semantic Network Analysis for Assessing the Impact of Documentaries", in *WIN (Workshop on Information in Networks)* New York. 2013

ACADEMIC Graduate Teacher Certificate May 2018
HONORS Kishore Vaigyanik Protsahan Yojana Scholar 2007–2012
& AWARDS Scholarship for science students doing research in India
3rd rank in Regional Mathematics Olympiad, Uttar Pradesh, India 2006

TEACHING

Co-instructor - Network Analysis, Spring '18

Teaching network analysis applications on social media data using python.

Teaching Assistant - Network Analysis, Summer '17

As part of the Information Science and Engineering Summer Program organized for Chinese students, sponsored by Global Education and Training (GET)

Teaching Assistant - Foundations of Information Processing, Spring '17

Co-instructor - Data Mining Applications, Fall '16 Listed in Teachers Ranked as Excellent By Their Students!

ACADEMIC ROLES

Reviewer for SNAM '16 and sub-reviewer for IC²S² (17), HyperText (16,17), SNAM '15, ICWSM (16,17), ECML PKDD '15, SM Society (15,17), COINS '15, SBP (15,17), and SocInfo '14.

RESEARCH PROJECTS

School of Information Sciences, University of Illinois at Urbana-Champaign

Research Assistant

Multitask deep learning for improving information extraction from social media data Aug 2017 – Building open source tool for supporting various information extraction tasks from social media.

Automatic taxonomy construction for computer science papers and application to studying scholarly careers in South Korea

Aug 2017 –

Funded by Korean Institute of Science and Technology Information

Profiling authors and articles based on novelty, expertise and self-citation in PubMed Jan 2014 – abel.lis.illinois.edu/legolas , abel.lis.illinois.edu/gimli

ConText - Tool for extracting and analyzing network data from text May 2014 – context.ischool.illinois.edu

Entity Extractor using CRF and Deep Learning github.com/napsternxg/TwitterNER

May 2014 – Aug 2015

SAIL - Sentiment Analysis and Incremental Learning github.com/uiuc-ischool-scanr/SAIL

SentiNets 2013 – 2014

Identification of enthusiastic supporters of social causes using text and network analysis.

Department of Mathematics, Indian institute of Technology, Kharagpur

Master Thesis: Analysis of Social Media Data to determine Positive and Negative Influential Nodes in the Network

Jul 2011 – May 2012

Supervisors: Dr. Gloria Ng (NUS, Singapore) & Dr. Pawan Kumar

Institute of Systems Science, National University of Singapore

Research Assistant

Tagging Singapore - A cloud based system using mash-up of dynamic data and online geographical maps for information co-creation May 2009 – Jul 2009

Supervisors: Dr. Gloria Ng

The work was incorporated as a workshop exercise in the course on Service Innovation [SG5228].

PERSONAL PROJECTS

Deep Sequence Classification

Jan 2016

A deep learning based sequence classification model for text data. It uses a combination of word embeddings and convolution features over characters of each token. It is jointly trained to predict the boundary and category classes per token. https://github.com/napsternxg/DeepSequenceClassification

Flavor savor Feb 2015

 $An online \ map\ based\ interface\ for\ suggesting\ nearby\ restaurants\ based\ on\ flavor\ popularity\ and\ writing\ reviews\ using\ hastags.\ https://github.com/napsternxg/FlavorSharer$

Facebook Group Visualizer

Oct 2014

A tool for temporal visualization of Facebook group time-lines with focus on identifying author, post and comment networks. http://shubhanshu.com/FacebookGroupVisual/index.html

ReadLater 201

A Google Chrome extension for storing unread pages for later viewing. Uses Google Chrome synchronized storage. 4 star rating and 8,000+ users on chrome store. https://github.com/napsternxg/ReadLater

PROFESSIONAL WORK

Twitter, San Francisco, USA

Intern, Content Understanding & Applied Deep Learning

Jun 2018 - Sep 2018

EXPERIENCE Worked on linking entities in tweets to Wikipedia pages (wikification task).

Built a library using Tensorflow for training, evaluation, and deployment of multiple wikification models. Improved the existing model by a significant margin.

Citrix, Bangalore, India

Software Engineer, NetScaler INFRA Team

Jul 2012 – Jul 2013

Authorization and content switching policy for NetScaler 10.1,

Real time document annotation and chat collaboration UI for Podio workspaces in Node.js

Barclays Capital, Singapore

Global Technology Analyst

May 2011 - Jul 2011

Enhanced 6 year old VB 6.0 software and documented it, which saved the team 1 week per month of work. Developed C# based web application for deployment of scripts on OpenLink and Oracle.

Global Venture Lab, Jyvaskyla, Finland

Lead Web Developer

Dec 2009 - Jan 2010

Prototyped the company portal for networking & project management of its global membership. Developed & administered the company website, and coached the employees on its usage.