Mukund Srinath

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EDUCATION

Pennsylvania State University

August, 2019 - Present

PhD, Informatics

Research Interests: Natural Language Processing, Information Retrieval

Co-supervised by C. Lee Giles and Shomir Wilson

Pennsylvania State University

August, 2017 - May, 2019

MS, Information Sciences and Technology

GPA: 3.88

Visvesvaraya Technological University, India

 $August,\ 2011\ \text{-}\ May,\ 2015$

BE, Electrical and Electronics Engineering

GPA: 8.94

RESEARCH EXPERIENCE

Human Language Technologies Lab

Pennsylvania State University

Research Assistant

August, 2019 - Present

- · Applying NLP and IR methods to analyze privacy policies at scale.
- · Crawled 1 million privacy policies and currently designing a ranking function based on policy merit.
- · Implemented a classifier which separated privacy policies from other documents with F1 score of 0.94.

University Libraries

 $Graduate\ Assistant$

Pennsylvania State University

August, 2018 - July, 2019

- · Designed experiments to study the effects of digital badges on student library engagement, and effects of information literacy skills on student performance in undergraduate courses.
- · Collated data from 7 undergraduate courses, \sim 4000 students, \sim 8000 library use records and 10 digital badges.

PIKE Group

Researcher

Pennsylvania State University August, 2017 - July, 2019

- · Designed a novel technique to select best answers from a list of non-fact-based questions by generating questions.
- · Implemented a Convolutional Neural Network based algorithm using TensorFlow to rank answers achieving a precision@1 score of 0.452 and MRR of 0.59, thereby setting a baseline for a novel dataset.

WORK EXPERIENCE

ClearAvenue

Columbia, MD

Software Engineering Intern

May, 2018 - August, 2018

- · Designed a proof of concept to improve medical device security in software defined networks.
- · Explored unsupervised anomaly detection methods to detect potential network security threats.

McFadyen Digital

Bangalore, India

Software Engineer

July, 2015 - July, 2017

- · Implemented a full-life-cycle webapp of a human resource information system supporting ~ 500 users.
- · Developed backend and frontend eCommerce features for search, payment and checkout functionality.

AWARDS

- · 2nd place in HackPSU, 2019 for *Beyond Tweet*, an application that combines geospatial census data with tweet sentiment to help make market predictions.
- 2nd place and \$17.5k funding in Nittany AI Challenge, 2018 for *ProFound: a professor search engine*.
- · 3rd place in HackPSU, 2018 for WeatherOrNot an application to recommend vacation destinations.
- 1st place and honorable mention by IBM at HackPSU, 2017 for *FindViser* an application that suggests research advisers to graduate students.

SELECTED PROJECTS

Fake News Prediction

Designed a two-stage approach to fake news detection based on text coherence and sentiment features. Obtained state of the art results on AICS18 workshop challenge with an accuracy of 86%.

ProFound: Professor Search Engine

Designed an end-to-end system to track professors based on research topics and interests. Crawled, indexed and ranked ~ 500 websites of professors using Elasticsearch after automatic categorization.

Facebook Check-in Prediction

Developed a machine learning model to predict where a user will check-in based on location and time. Worked with large data-sets with over 30 million data points and 100 thousand classes.

SKILLS

Programming Languages	Python, Java, Javascript, C++
Frameworks and Packages	TensorFlow, PyTorch, ElasticSearch, Scrapy, Django, SQL

PUBLICATIONS

Srinath, M., Wilson, S., Giles, C. L. (2020). Privacy at Scale: Introducing the PrivaSeer Corpus of Web Privacy Policies. arXiv preprint arXiv:2004.11131.

Srinath, M. (2019). Convolutional Neural Network and Question Generation Based Approaches to Select Best Answers for Non-Factoid Questions. (Master's thesis, Pennsylvania State University) https://etda.libraries.psu.edu/catalog/16516mus824