

Mukund Srinath

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EDUCATION

Pennsylvania State University

Expected: May, 2023

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 - 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 1M privacy policies, created the [PrivaSeer](#) search engine and designed a policy ranking function.
- Trained a transformer-based language model to create pretrained vector representations in the privacy domain, achieving state of the art results on multi-class multi-label classification and named entity recognition (NER) tasks.

University Libraries

Pennsylvania State University

Research Assistant

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, ~4000 students, ~8000 library use records and 10 digital badges.

PIKE Group

Pennsylvania State University

Researcher

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 (CNN) based algorithm using TensorFlow to rank answers achieving a precision@1 score of 0.452 and mean reciprocal rank 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 \$20,000 in 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

Personal Information Extraction

Designed a novel scalable technique to extract the types of personal information collected from users from over 1.4 million privacy policies. Trained a BERT based model to identify valid personal information types given inputs of noun phrases and their POS tags.

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 precision 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 academic websites.

SKILLS

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

PUBLICATIONS

Mukund Srinath, Shomir Wilson, C. Lee Giles.

Privacy at Scale: Introducing the PrivaSeer Corpus of Web Privacy Policies.

59th Annual Meeting of the Association for Computational Linguistics (**ACL**, 2021)

Mukund Srinath, Soundarya Sundareswara, Shomir Wilson, C. Lee Giles.

PrivaSeer: A Privacy Policy Search Engine.

International Conference on Web Engineering (**ICWE**, 2021)

Soundarya Sundareswara, Shomir Wilson, **Mukund Srinath**, C. Lee Giles.

Privacy Not Found: A Study of the Availability of Privacy Policies on the Web.

Symposium on Usable Privacy and Security (**SOUPS**, 2020).

Mukund Srinath.

Convolutional Neural Network and Question Generation Based Approaches to Select Best Answers for Non-Factoid Questions.

(**Master's thesis**, Pennsylvania State University, 2019)