

Rajkumar Pujari

email: rajkumarsaikorian@gmail.com rajkumar-pujari.com Github: @pujari-rajkumar Phone: +1 (765)-701-7617

EDUCATION	Purdue University , West Lafayette, Indiana, USA Ph.D. in Natural Language Processing, Department of Computer Science	Aug 2017–Present 3.77/4.0
	Indian Institute of Technology Kharagpur , West Bengal, India B.Tech. (Hons.), Department of Computer Science and Engineering	Jul 2010–May 2014 9.10/10
PUBLICATIONS	Reinforcement Learning Guided Multi-Task Learning for Low-Resource Stereotype Detection Rajkumar Pujari, Erik Oveson, Priyanka Kulkarni and Elnaz Nouri Poster at ACL 2022 main conference held at Dublin, Ireland from May 22–27	
	Understanding Politics via Contextualized Discourse Processing Rajkumar Pujari and Dan Goldwasser Talk at EMNLP 2021 main conference, Punta Cana, Dominican Republic on November 6–12	
	Using Natural Language Relations between Answer Choices for Machine Comprehension Rajkumar Pujari and Dan Goldwasser Talk at NAACL-HLT 2019 main conference, Minneapolis, USA on June 2–7	
	Can Taxonomy help? Improving Semantic Question Matching using Question Taxonomy Deepak Gupta, Rajkumar Pujari, Asif Ekbal, Pushpak Bhattacharyya, Anutosh Maitra, Tom Jain and Shubhashis Sengupta Poster at COLING 2018 main conference, Santa Fe, New Mexico, USA, August 20–24	
	A Novel Two-stage Framework for Extracting Opinionated Sentences from News Articles Rajkumar Pujari, Swara Desai, Niloy Ganguly and Pawan Goyal Talk at Textgraphs-9 workshop at EMNLP 2014, Doha, Qatar, October 25–29	
RESEARCH EXPERIENCE	Ph.D. Student, Purdue University <i>Contextualized Discourse Representations; Machine Comprehension; Social Norm Understanding (Pragmatics)</i> Prof. Dan Goldwasser Worked on investigating the usefulness of common sense knowledge and inferences in machine comprehension. Currently working on developing a distributed and interpretable representation for large political corpora. Also, working on a Chinese Cultural Norm Understanding project that leverages Large Language Models combined with symbolic models to automatically extract social norms and their violations from conversational text.	Aug 2017–Present
	Project Research Assistant, CFILT, IIT Bombay <i>Semantic Question matching using a taxonomy and DL representations</i> Developed a restricted-domain QA system for Accenture labs, Bangalore. Was primarily focused on developing a hierarchical taxonomy and subsequent classification algorithms used for semantic question matching.	Jan 2016–May 2017 Prof. Pushpak Bhattacharyya
	Bachelor Thesis Project, IIT Kharagpur <i>Extracting opinionated sentences from news articles</i> Developed a novel two-stage framework to extract opinion-bearing sentences from news articles. The framework is a pipeline of sentiment classifier and a graph-based algorithm analogous to HITS in collaboration with Yahoo!.	Jul 2013–May 2014 Prof. Niloy Ganguly
RELEVANT INTERNSHIPS	JEM Intern, Microsoft Research, Redmond <i>RL-guided Multitask model for Stereotype Detection in Text</i> Worked on Reinforcement Learning guided Multitask Learning Model for <i>Stereotype Detection</i> . Leveraged several toxicity datasets such as <i>Hate-Speech</i> , <i>Misogyny & Offensive Language</i> to systematically improve performance on the task of <i>Stereotype Detection</i> . Built a <i>Stereotype Detection</i> dataset using Amazon Mechanical Turk.	May 2021–Aug 2021 Elnaz Nouri, Erik Oveson and Priyanka Kulkarni
	Applied Scientist Intern, Amazon Alexa Conversational Search Team <i>Conversational Question Answering in Sports Domain</i> Developed a new conversational QA dataset for sports domain. Built a ParlAI-style data collection tool and collected the dataset using Amazon MTurk. Also designed a generative neural architecture for the task.	May 2019–Aug 2019 Kevin Small
	Summer Internship, Yahoo! Bangalore, India <i>Relevance ranking of comments on news articles</i> Designed and implemented a comment ranking algorithm which scores comments based on the relevance of the comment text to the article and its yahoo classification category (YCT).	May 2013–Jul 2013 Ms.Swara Desai

Externship, Yahoo! Bangalore, India

Mar 2013–Apr 2013

Extracting tweets relevant to given news article

Ms.Swara Desai

Designed and implemented an algorithm to construct queries from news articles using named entities and highly co-occurring words. Collected tweets from twitter firehose API using those queries.

**POSITIONS OF
RESPONSIBILITY**
Program Committee Member - Reviewer; *Outstanding Reviewer

ACL ARR, AAAI 2023, EMNLP 2022, NAACL 2022, COLING 2022, ACL 2022, AAAI 2022, ACL-IJCNLP 2021*, EMNLP 2021, NAACL-HLT 2021, AAAI 2021, EMNLP 2020, COLING 2020, IJCAI 2020, AAAI 2020, NAACL-HLT 2019, EMNLP-IJCNLP 2019, TALLIP Journal

Graduate Teaching Assistant

Jul 2017–Present

Served as a Teaching Assistant for Data Mining and Machine Learning, Web Information Search & Management, Data structures & Algorithms and Operating Systems undergraduate courses.

President, Purdue University Cricket Club

May 2019–Jun 2021

Responsible for organizing club tournaments for 250 people, raising funds and managing an annual budget of USD \$7000.

**WORK
EXPERIENCE**
Senior Quantitative Researcher

Jul 2014–Dec 2015

WorldQuant Research, India

Was responsible for researching financial and mathematical literature and understanding various datasets to identify sources of market inefficiencies and convert them to predictive profitable models called *alphas*. The objective was to identify and construct signals, make robust models from them with high sharpe ratios (returns / risk) and significant abnormal returns. Concentrated mainly on seeking low turnover quality *alphas* for trading in the equity market which are used in developing algorithmic daily re-balancing long-short trading strategies on US, Europe, Asian and other markets

**NOTABLE
ACHIEVEMENTS**

Was promoted to Senior Quantitative Researcher after 1st year at Worldquant Research for exceptional performance
Secured a Department Change from Electrical Engineering department to Computer Science and Engineering department at the end of first year on the basis of academic merit

Secured 840th rank amongst more than 450,000 students (99.81 percentile) in IIT-JEE 2010 and 939th rank amongst more than 1,000,000 students (99.91 percentile) in AIEEE 2010

Qualified among Center Top 10% in National Standard Examination in Physics and National Standard Examination in Chemistry conducted by Indian Association of Physics Teachers (IAPT) in Class XII standard.

**KEY
COURSES**

Graduate Level: Machine Learning Methods for NLP, Statistical Machine Learning (A+), Deep Learning, Numerical Methods for Optimization, Algorithm Design and Analysis, Operating Systems

Data Mining: Information Retrieval, Machine Learning, Speech and Natural Language Processing

Electives: Advanced Graph Theory, Artificial Intelligence, Computational Number Theory, Database Management and Systems, Distributed Systems, Formal Systems, Foundations of Cryptography

**KEY
PROJECTS**
Summer Project, IIT Kharagpur

May 2012–Jun 2012

Tracking soccer players in a video

Prof.Partha Pratim Das

Worked on various color segmentation algorithms and implemented a tracking algorithm based on position prediction in successive frames using MATLAB Image Processing Toolkit

**EXTRA-
CURRICULAR
ACTIVITIES**

Represented Purdue University Cricket Club in Midwest Cricket Conference 2018, Midwest Cricket Tournament 2019 & 2021.

Served as a Senior Writing Team Member of Entrepreneurship Cell IIT Kharagpur in academic year 2011–2012

Served as an National Service Scheme (NSS) volunteer for 1 year in Education Improvement Group and an National Cadet Corps (NCC) cadet for 6 years and was awarded NCC-A & B certificates

Part of 6-member team that qualified for the finals of NIGHTSHIFT event in Kshitij 2012, annual techno-management fest of IIT Kharagpur

REFERENCES

Prof. Dan Goldwasser, Purdue University

email: dgoldwas@purdue.edu

Kevin Small, Amazon.com

email: smakevin@amazon.com

Elnaz Nouri, Microsoft Research

email: elnaz.nouri@microsoft.com