

Hrishikesh Kulkarni

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Google Scholar

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St. Mary's Hall, Georgetown University,

Washington D.C. 20057

EDUCATION

- **Georgetown University** Washington D.C., U.S.A
Ph.D. - Computer Science 2020 - Present
- **Savitribai Phule Pune University** PVGCOET, Pune MH, India
B.E. - Computer Engineering 2016 - 2020

RESEARCH EXPERIENCE

- **Georgetown University** Washington D.C., U.S.A.
Research Assistant (C.S. Dept) Aug 2020 - Present
- **National Insurance Academy** Pune MH, India
Research Intern (Mentor: Dr. S. Page) Jun 2019 - Aug 2019
- **iKnowlation Research Labs** Pune MH, India
Research Intern (Mentor: Dr. P. Chande) Jul 2017 - Dec 2017

TEACHING EXPERIENCE

- **Information Retrieval (COSC-488)** Georgetown University
Teaching Assistant (Professor: Dr. Nazli Goharian) Aug 2022 - Dec 2022
- **Introduction to DBMS (COSC-280)** Georgetown University
Teaching Assistant (Professor: Dr. Nazli Goharian) Aug 2022 - Dec 2022
- **Data Mining (COSC-285)** Georgetown University
Teaching Assistant (Professor: Dr. Nazli Goharian) Aug 2021 - Dec 2021
- **Open Source Club** Pune MH, India
Founder and Mentor Aug 2018 - May 2020

OTHER EXPERIENCE

- **Google Summer of Code - GNU Compiler Collection (GCC)** Remote
Summer Intern (Mentors: Martin Liska, Jan Hubicka) May 2018 - Aug 2018
- **Kaizen Infosys** Pune MH, India
Summer Intern (Mentor: Nenadd Chandorkar) May 2017 - Jul 2017

SELECTED PUBLICATIONS

- **Genetic Generative Information Retrieval:**
Hrishikesh Kulkarni, Zachary Young, Nazli Goharian, Ophir Frieder, Sean MacAvaney
DocEng 2023
- **Lexically-Accelerated Dense Retrieval:**
Hrishikesh Kulkarni, Sean MacAvaney, Nazli Goharian, Ophir Frieder
SIGIR 2023
- **Knowledge Augmentation for Early Depression Detection:**
Hrishikesh Kulkarni, Sean MacAvaney, Nazli Goharian, Ophir Frieder
AAAI W3PHIAI 2023
- **TBD3: A Thresholding-Based Dynamic Depression Detection from Social Media for Low-Resource Users:**
Hrishikesh Kulkarni, Sean MacAvaney, Nazli Goharian, Ophir Frieder
LREC 2022
- **High-Quality Dialogue Diversification by Intermittent Short Extension Ensembles:**
Zhiwen Tang, Hrishikesh Kulkarni, Grace Hui Yang
ACL Findings 2022
- **Sentiment Progression Based Searching and Indexing of Literary Textual Artefacts:**
Hrishikesh Kulkarni, Bradly Alicea
Springer NLDB 2021
- **Pivot Point Based Intelligent System to Associate Creative Textual Artefacts:**
Hrishikesh Kulkarni, Bradly Alicea
Springer IEA/AIE 2021
- **Cultural, Emotional, and Associative Traits to Determine Literary Inclination:**
Hrishikesh Kulkarni, Bradly Alicea
PsyArXiv 2020
- **Context vector convergence of computational behaviour and cultural traits for team selection:**
Hrishikesh Kulkarni, Manisha Marathe
Inderscience Journal IDIDS 2021

- **Computational Psychology to Embed Emotions into Advertisements to Develop Emotional Bonding:**
Hrshikesh Kulkarni, Prachi Joshi, PK Chande
Indian Journal of Psychological Science 2019
- **Personalized Newspaper Based on Emotional Traits Using Machine Learning:**
Hrshikesh Kulkarni, Tejas Joshi, Nikhil Sanap, Rohan Kalyanpur, Manisha Marathe
IEEE ICCUBEA 2019
- **Cultural Association Based on Machine Learning for Team Formation:**
Hrshikesh Kulkarni, Bradly Alicea
IEEE ICCUBEA 2019
- **Machine Learning Based Cultural Suitability Index (CSI) for Right Task Allocation:**
Hrshikesh Kulkarni, Manisha Marathe
IEEE ICECCT 2019
- **Multi-Agent System for Customer Behavior Tracking Using Shoppers Path Traversal:**
Hrshikesh Kulkarni, P Patil, R Menon
IEEE ICECCT 2019
- **Computational Psychology to Embed Emotions into Product to Increase Customer Affinity:**
Hrshikesh Kulkarni, Prachi Joshi, Pradip Chande
Springer ICICCT 2019
- **Cultural Affinity through Associative Machine Learning and Behavioral Computation:**
Hrshikesh Kulkarni, Bradly Alicea
NAPS IPC 2018
- **Computational Psychology to Embed Emotions into News or Advertisements to Increase Reader Affinity:**
Hrshikesh Kulkarni, Prachi Joshi, Pradip Chande
NAPS IPC 2018
- **Multi-Graph based Intent Hierarchy Generation to Determine Action Sequence:**
Hrshikesh Kulkarni
Springer ICDECT 2017
- **Thought Process based Team Member Selection Using Contextual Sentiment Closeness:**
Hrshikesh Kulkarni
IEEE I2CT 2017
- **Intent Action Ontology and Tone Matching Algorithm for Organizing News Articles:**
Hrshikesh Kulkarni
IEEE ICECDS 2017
- **Intelligent Context Based Prediction using Probabilistic Intent-Action Ontology and Tone Matching Algorithm:**
Hrshikesh Kulkarni
IEEE ICACCI 2017
- **Contextual Data Representation Using Prime Number Route Mapping Method and Ontology:**
Hrshikesh Kulkarni
IEEE ICCUBEA 2017

PATENTS

- **WO2019026087 - An intelligent context based prediction system:**
Hrshikesh Kulkarni
WIPO (Indian Patent) 2017

HONORS AND AWARDS

- ACM SIGIR Student Travel Grant
- Merit-based Graduate School full tuition scholarship and research assistantship stipend award for 5 years - Georgetown University
- Best Outgoing Student Award: Computer Engineering, PVGCOET, SPPU, Pune 2019-2020
- Best Paper Award: Hrshikesh Kulkarni, Bradly Alicea, "Cultural Association Based on Machine Learning for Team Formation", IEEE ICCUBEA 2019
- Best Paper Award: Hrshikesh Kulkarni, "Contextual Data Representation Using Prime Number Route Mapping Method and Ontology", IEEE ICCUBEA 2017
- Only candidate selected by GNU Compiler Collection (GCC) for Google Summer of Code (GSOC) 2018
- Founded Open Source Club at PVGCOET Pune 2018
- Student representative for IQAC (Internal Quality Assurance Cell) PVGCOET 2018-2020 (out of 1200 students)
- PVG Merit Award: First admission award - 2016 (out of 500 students)
- Stood Sixth in High School Scholarship - 2011 (out of 30000 students)

SKILLS

- Highly proficient in Python, TensorFlow, PyTorch and also worked on projects in C, C++, Java and R

LANGUAGE PROFICIENCY

- Native/Bilingual proficiency (read, write and speak) in English, Marathi and Hindi