Devang Kulshreshtha

[Website] [Google Scholar] [LinkedIn]

PERSONAL DETAILS

E-Mail	devang.kulshreshtha@mail.mcgill.ca
Phone	+1 514 570 3895
Position	M.Sc. at McGill University, MILA Lab

EDUCATION

McGill University, MILA Lab 2020 - present
M.Sc. in Computer Science (GPA: 4.0/4.0).
Supervisor - Prof. Siva Reddy

Indian Institute of Technology (BHU) Varanasi 2014 - 2018
B.Tech. Computer Science (GPA: 9.11/10.0)

PUBLICATIONS

- **Back-Training excels Self-Training at Unsupervised Domain Adaptation of Question Generation and Passage Retrieval** [Paper]
  Devang Kulshreshtha*, Robert Belfer, Iulian Vlad Serban, Siva Reddy
  arXiv preprint, EMNLP 2021 submission

- **How emotional are you? Neural Architectures for Emotion Intensity Prediction in Microblogs** [Paper] [Presentation] [Code]
  Devang Kulshreshtha*, Pranav Goel*, Anil Kumar Singh.
  International Conference on Computational Linguistics (COLING) 2018

- **NLPRL-IITBHU at SemEval-2018 Task 3: Combining Linguistic Features and Emoji pre-trained CNN for Irony Detection in Tweets** [Paper]
  Harsh Rangwani, **Devang Kulshreshtha**, and Anil Kumar Singh.
  SemEval Workshop, NAACL-HLT 2018

- **Feature Augmented Deep Neural Networks for Collaborative Filtering** [Paper][Code]
  Devang Kulshreshtha.
  IJCAI 2017 Workshop on AI Applications in E-commerce

- **Prayas at emoint 2017: An ensemble of deep neural architectures for emotion intensity prediction in tweets.** [Paper][Presentation]
  Pranav Goel*, **Devang Kulshreshtha***, Prayas Jain and K.K. Shukla.
  8th WASSA Workshop at EMNLP 2017 (Shared Task Winner!)

RESEARCH EXPERIENCE

Korbit.AI - Research Intern Sept 2020 - Current
Supervisors: Prof. Siva Reddy and Dr. Iulian Vlad Serban

- Working on unsupervised domain adaptation for Question-Answer Generation from open educational resources, submitted ongoing work to EMNLP 2021.

INRIA Labs, France - Research Intern May 2018 - July 2018
Supervisors: Prof. Alexandre Termier and Prof. Elisa Fromont

- Worked on discriminative pattern mining to identify subgraphs in DNNs frequently activated on wrong output. Adapted 'Activation Maximization' to identify such patterns, and infer mistakes in DNN using such activations. Improved results on MNIST, LeNet-5 by 1%.

CFILT Lab, IIT Bombay - Research Intern May 2016 - July 2016
Supervisors: Prof. Pushpak Bhattacharya and Prof. Ganesh Ramakrishnan

- Developed an end-to-end search engine add-on from scratch that presents Pseudo-Documents and facets for resource scarce languages in case of transactional queries.

SOFTWARE ENGINEERING EXPERIENCE

Amazon - Software Engineer Sept 2018 - Sept 2020
New Delhi, India

- Designed scalable monitoring system that tracks carrier invoices at various systems and report anomalies using rule-based detection mechanisms. Part of a major team initiative for migrating services from coral to NAWS.

Amazon - SDE Internship May 2017 - Jul 2017
Project: Mobile Development of Onboarding Flow

Busigence - Data Science Intern Dec 2016 - Jan 2017
Project: Constructing deep learning framework for e-commerce recommender systems

TEACHING

Teaching Assistant Spring 2018
Introduction to Artificial Intelligence
Indian Institute of Technology (BHU) Varanasi
Teaching Assistant Fall 2016
Introduction to Programming in C
Indian Institute of Technology (BHU) Varanasi

AWARDS AND SCHOLARSHIPS

- Recieved Kharusi Family International Science Fellowship 2021 for exceptional graduate students coming to McGill University from international locations.
- Selected for onsite interview at Zurich, Switzerland for Google AI Brain Residency Program 2019.
- Received 1500 USD from Microsoft Research India as Travel Grant to attend COLING 2018.
- Winning team in shared task on Emotion Intensity Prediction and invited for an oral talk at WASSA EMNLP 2017 conference at Copanhagen, Denmark.
- Among the top 10 finalists from India in the Amazon Code Wizard Challenge 2017.
- Received about USD 700 from IIT (BHU) Varanasi as Travel Grant to attend IJCAI 2017.

RELEVANT COURSES

- **McGill University -** Representation Learning (IFT6135), Applied Machine Learning (COMP551), Natural Language Processing (COMP550), Mathematics for Computer Science (COMP761)
- **IIT Varanasi -** Probability and Statistics (MA202), Artificial Intelligence (CS202), Computer Vision (CS352)