# **Ashish Gupta**

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#### **INTERESTS**

Machine Learning, Natural Language Processing, Information Extraction, Information Retrieval, Reinforcement Learning

### **EDUCATION**

### IIIT Bangalore, Bangalore, Karnataka

• M.Tech in IT with specialisation in Data Science

Jul 2016 - Jul 2018

- Thesis: Question Answering using Video transcripts
- Adviser: Prof. Manish Gupta
- Focus: Information Retrieval, Information Extraction, Videos, Attention Mechanism, Bidirectional LSTM, Distant Supervision, Differential Weighing
- Cumulative GPA: 3.57 / 4.0

#### **SRMCEM**, Lucknow, Uttar Pradesh

■ B.Tech in CSE

Aug 2008 – Jun 2012

- Deans List for 3 years.
- Percentage: 75.08

#### RELEVANT EXPERIENCE

# • Reviewer of IR Journal: Learning from User Interactions

Jun 2019 – Present

#### **Data Scientist**

#### • Walmart Labs India, Kadubeesanhalli, Bangalore

Jul 2018 – Present

- Working in Catalog Data Science team.
- Developed deep learning models for attribute extraction from text.
- Developed a Smart normalization tool to match the non-standard/junk text present in the catalog to the standard text.
- Developed BERT based models for classification and sequence labeling in Multi-lingual models.
- Lead an initiative to build an autotagger tool for reducing the amount of tagged data and build efficient models with limited data.
- Worked on jointly leveraging strong supervision data along with weak supervision data to train neural models.

#### Research Assistant

# VideoKen Software Pvt. Ltd, IIIT Bangalore Innovation Centre

Jan 2018 - Jun 2018

Worked on Question Answering from Video subtitles. Used Attention Mechanism, Bidirectional LSTM, self-attention
and did meaningful bifurcations of the raw text to complete the task.

### **Teaching Assistant**

# ■ **IIIT Bangalore**, Opposite Infosys Gate 1

Jan 2018 – Jun 2018

• Teaching Assistant for Courses Maths for ML and Machine Learning 1 under Prof. G. Srinivasaraghavan and Prof. Dinesh Babu Jayagopi

#### **Systems Engineer**

■ Tata Consultancy Services, Kolkata, India

Nov 2012 - Jun 2016

- Worked in Oracle apps (an ERP tool) as an OTR consultant. Worked in GE Healthcare projects.
- · Worked in SCM(Supply Chain Management), Purchase Order and Order Management modules of Oracle apps.
- Worked in project Germany LCS Project, WIPROGE LE Merger, Oracle R12 upgrade where I made and updated some of the custom PL/SQL codes.

#### **PUBLICATIONS**

#### CONFERENCES

#### Hyperparameter optimization with REINFORCE and Transformers

- Chepuri Shri Krishna, Ashish Gupta, Swarnim Narayan, Himanshu Rai, and Diksha Manchanda is Under Review
- Ultron-AutoML: an open-source, distributed, scalable framework for efficient hyper-parameter optimization
  - Swarnim Narayan, Chepuri Krishna, Varun Mishra, Abhinav Rai, Himanshu Rai, Chandrakant Bharti, Gursirat Singh, Ashish Gupta, and Nitinbalaji Singh in IEEE BigData 2020
- Learning with Limited Labels via Momentum Damped Differentially Weighted Training
  - Rishabh Mehrotra, Ashish Gupta in KDD 2020.

#### Joint Attention Neural Model for Demand Prediction in Online Marketplaces

- Ashish Gupta, Rishabh Mehrotra in NLDL 2020.
- Sequence-aware Reinforcement Learning over Knowledge Graphs
  - Ashish Gupta, Rishabh Mehrotra in RecSys REVEAL 2019.
- Neural Attention Reader for Video Comprehension
  - Ashish Gupta, Rishabh Mehrotra, Manish Gupta in KDD Deep Learning Day 2018.

#### **PATENTS**

# Automated Tagging Approach for ML Models

- Abhinav Rai, Arpit Gupta, Ashish Gupta, Diksha Manchanda, Abdulsakib Mondal and Tuhin Bhattacharya
- Ultron-AutoMLv2: a distributed framework for efficient hyper-parameter optimization (HPO) of ML models
  - Chepurishri Krishna, Amit Agarwal, Ashish Gupta, Swarnim Narayan, Himanshu Rai, Varun Mishra, Abhinav Rai, Chandrakant Bharti, Gursirat Singh and Nitinraj Balajisingh

#### **BLOGS**

# An Introduction to Meta-Learning

Introduction to Reinforcement Learning

#### **PROJECTS**

# **Deep Recurrent Generative Decoder for Abstractive Text Summarization (EMNLP 2017)**

Sequence to sequence oriented encoder decoder model with attention mechanism and variational auto encoders.

■ Novel approach to text summarization with GRU and attention mechanism. Oct 2019 – Dec 2019

# **Hierarchical Attention Networks for Document Classification**

Implementation of Hierarchical Attention Networks paper NAACL 2016.

• Movie reviews from IMDB dataset are used for prediction.

Mar 2018 - Mar 2018

# Image-based-recommendations,

Guide:- Prof. Dinesh Babu Jayagopi

Recommending apparels to users based on their choice and the complementary products. This work was
done on a subset of Amazon dataset.

**Click here** to checkout the video.

Mar 2017 – May 2017

# ACHIEVEMENTS / CO-CURRICULAR ACTIVITIES

- Top 12%(Placed 30 out of 252 teams) in KDD 2019 | Policy Learning for Malaria Control Maximize rewards for malaria prevention sequential decision making task.
- Top 20%(Placed 303 out of 1571 teams) in Google QUEST Q&A Labeling Improving automated understanding of complex question answer content.
- Top 3%(Placed 94 out of 4037 teams) in Quora Insincere Question Classificatiomn To identify and flag insincere questions in Quora.
- Top 1.4%(Placed 28 out of 2000 teams) in Microsoft AI India Challenge 2018 Ranking passage according to relevance containing answer to a given question.
- Top 12%(Placed 454 out of 3967 candidates) in Kaggle (TalkingData AdTracking Fraud Detection) Challenge Predicting whether a user will download an app after clicking a mobile app ad.
- Achieved AIR 56 in ISRO Scientist/SC exam(July 16).
- Qualified GATE'16 with 98.8 percentile(Feb'16).

# AWARDS & SCHOLARSHIPS

Winner of AI Hackathon organized by Target HR Bangalore

Aug 2018

• Finalist in Synechron Hackathon, Bangalore

Sep 2017

Dean's List, Fall 2008 through Spring 2011, SRMCEM

2008 - 2011

# PROFESSIONAL AFFILIATIONS & ACTIVITIES

# **Natural Language Processing with Attention Models**

• Coursera 2020 – Present

# **Sequence Models**

■ Coursera 2018 – Present

# **Association for Computing Machinery**

■ Student Member 2017 – Present

#### **SKILLS**

■ Tensorflow, PyTorch, Keras, scikit-learn, spaCy, seaborn(Statistical Data Visualization)

- C, Java, Python
- Pycharm, Google Colab, AWS, EclipseMySQL, MongoDB, MS SQL Server

# LINKS

- Github:// **Ashish-Gupta03**
- LinkedIn:// ashishgupta031
- Kaggle:// eashish
- Hackerearth:// @AshishG03Hackerrank:// MT2016026

### **COURSEWORK**

- Introduction to Text Processing and Information Retrieval
- Machine Learning
- Machine Perception
- Foundations of Big Data and Algorithms
- Linear Algebra