

RRICHA JALOTA

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EDUCATION

Master in Data Science

Technische Universität Dortmund

📅 April 2020 - Present

📍 Germany

B. Tech. in Electronics and Communication Engineering

Indira Gandhi Delhi Technical University for Women (IGDTUW)

📅 2013 - 2017

📍 Delhi, India

WORK EXPERIENCE

Scientific Developer

Data Science Group, Universität Paderborn

📅 Sept 2017 - Present

📍 Germany

Working in the domain of **Semantic Web and Natural Language Processing** - Question Answering Systems, Conversational Agents, Information Retrieval and Classification. Key highlights:

- Landed among the **top-3 teams** in **TREC Incident Stream Challenge 2019-A** wherein we employed the state-of-the-art Transformer (deep learning) models together with ensemble learning for multi-label classification to categorize information and aid requests made on social media.
- Competed to be among the **top-4 finalists** in the **Rich Context Competition 2018-19** - we used a combination of specially trained Conditional Random Fields and word embeddings to identify the dataset mentions and infer the scientific methods used and the research field of a social-science publication.
- Participated in the **TREC Incident Stream Challenge 2018**; we compared classical ML and Deep Learning approaches with a combination of knowledge graph and deep learning.
- Contributed to creating a **Question Answering Benchmark Curator** - A novel framework for the creation and curation of Question Answering benchmarks.
- Co-mentored a Project Group of masters students in the Summer Semester, 2018 for the development of an **Intelligent Data Assistant**.
- Co-authored scientific articles and reviewed papers for International Conferences and Workshops.

SIDE-PROJECTS

Check out my [Github Profile](#) for a complete/up-to-date list.

NLP and Machine Learning Projects

- **Question Answering Bot**
 - Built a Question-Answering Telegram bot using WolframAlpha API and Telegram's REST API. The bot could respond to "inline queries" as well as could give both text and image as response.
 - Github Link : github.com/rrichajalota/dbpedia-warmup-tasks
- **Face Generation Using Generative Adversarial Networks**
 - Implemented a Deep Convolutional GAN to generate synthetic human faces and analysed the effect of change in hyperparameters, batch normalisation, different activation functions and regularization on the output.
 - The model was trained on 700 cropped and aligned images of the CelebA dataset for 1700+ iterations.
 - Github Link : github.com/rrichajalota/generative-adversarial-networks

ACHIEVEMENTS

- **2019** - Attended **Google Summer of Code 2019 Mentor Summit** in October, 2019 as a DBpedia Delegate.
- **2019** - Program Committee member and Session Chair at **CONVERSATIONS 2019, the 3rd International Workshop on Chatbot Research**.
- **2019** - Represented my team in the workshop of **Rich Context Competition** at **New York University, Wagner Graduate School**.
Youtube Link: <https://goo.gl/nH6eRs>
- **2018** - Team got qualified to compete in the **Second Phase** of the **Rich Context Competition 2018-19** for which we received a stipend of 2000\$.
- **2018** - Got accepted as a **speaker** at the **EuroPython Conference, 2018** and received a partial Financial Aid to attend it.
- **2018** - Was among the 21 selected candidates to receive the Diversity Scholarship at **PyData Berlin, 2018**.
- **2018** - Was one of the Workshop Program Committee members in **Conversations 2018, the 2nd International Workshop on Chatbot Research**.
- **2015** - Consolation prize for a **Home Automation project, Smart Assistance**, in **Gridtech Student Innovation Pavilion 2015**, organised by **Power Grid Corporation of India LTD.** with support of Ministry of Power.

SKILLS AND STRENGTHS

Programming Languages:

Python, Java

C++

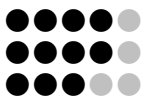


Frameworks and Technologies:

Tensorflow, Keras

Git, SVN

Docker



Soft Skills:

Communication Skills

Leadership



RELEVANT COURSEWORK

- Architecture and Implementation of Database Systems
- Survival Analysis
- Mathematical Optimization
- Natural Language Systems
- Econometrics of treatment effects and policy evaluation

PUBLICATIONS

Book Chapter


- Jalota, Rricha, Nikit Srivastava, et al. (2020). "Finding Datasets in Publications: The University of Paderborn Approach". In: *Rich Search and Discovery for Research Datasets*. Ed. by Julia I. Lane, Ian Mulvany, and Paco Nathan. SAGE Publications, pp. 129–141. ISBN: 978-1-5297-0586-7. URL: http://study.sagepub.com/sites/default/files/web_pdf.zip.

Conference Proceedings

- Gusmita, Ria Hari et al. (2019). "QUANT - Question Answering Benchmark Curator". In: *Semantic Systems. The Power of AI and Knowledge Graphs - 15th International Conference, SEMANTiCS 2019, Karlsruhe, Germany, September 9-12, 2019, Proceedings*, pp. 343–358. DOI: 10.1007/978-3-030-33220-4_25. URL: https://doi.org/10.1007/978-3-030-33220-4_25.
- Jalota, Rricha, Priyansh Trivedi, et al. (2019). "An Approach for Ex-Post-Facto Analysis of Knowledge Graph-Driven Chatbots - The DBpedia Chatbot". In: *Chatbot Research and Design - Third International Workshop, CONVERSATIONS 2019, Amsterdam, The Netherlands, November 19-20, 2019, Revised Selected Papers*, pp. 19–33. DOI: 10.1007/978-3-030-39540-7_2. URL: https://doi.org/10.1007/978-3-030-39540-7_2.
- Kaur, Paramjot et al. (2019). "Offline Question Answering over Linked Data using Limited Resources". In: *Proceedings of the Posters and Demo Track of the 15th International Conference on Semantic Systems co-located with 15th International Conference on Semantic Systems (SEMANTiCS 2019), Karlsruhe, Germany, September 9th - to - 12th, 2019*. URL: <http://ceur-ws.org/Vol-2451/paper-15.pdf>.
- Zahera, Hamada M., Ibrahim A. Elgendy, et al. (2019). "Fine-tuned BERT Model for Multi-Label Tweets Classification". In: *Proceedings of the Twenty-Eighth Text REtrieval Conference, TREC 2019, Gaithersburg, Maryland, USA, November 13-15, 2019*. URL: https://trec.nist.gov/pubs/trec28/papers/DICE%5C_UPB.IS.pdf.
- Zahera, Hamada M., Rricha Jalota, and Ricardo Usbeck (2018). "DICE @ TREC-IS 2018: Combining Knowledge Graphs and Deep Learning to Identify Crisis-Relevant Tweets". In: *Proceedings of the Twenty-Seventh Text REtrieval Conference, TREC 2018, Gaithersburg, Maryland, USA, November 14-16, 2018*. URL: <https://trec.nist.gov/pubs/trec27/papers/DICE-UPB-IS.pdf>.


VOLUNTEER EXPERIENCE

Google Summer of Code Mentor

 May 2019 - August 2019

- GSoC is a global program that focuses on bringing more student developers into open source software development. I mentored an under-graduate student for the project **Neural-QA model for DBpedia** to 1) improve its architecture and to 2) automate the template generation process of creating training datasets for the model.
- Certificate Link: <http://tiny.cc/dmo0cz>

Google Summer of Code Mentor

 May 2018 - August 2018

- Co-mentored a student under DBpedia Organization for the project **Neural-QA model for DBpedia**.
- Project Link : github.com/dbpedia/neural-qa
- Certificate Link : <https://bit.ly/2GbOlAs>

LearnIT, Girl!

 Oct 2017 - Jan 2018

- **Learn IT, Girl!** is an international mentorship program that helps women learn a new programming language by doing a project. I helped my mentee in learning Python/Django and making a **Language-learning bot** for facebook.
- Our chatbot is now one of the featured projects on their **website**.
- Project Link : github.com/ihsavru/LanguageBot
- Certificate Link : credential.net/r5piuksz

EXTRA-CURRICULARS

- Health and Fitness Enthusiast
- Theatre Artist - Was the President of Dramatics Society in University (IGDTUW)

CONNECT

 LinkedIn: [rrichajalota](https://www.linkedin.com/in/rrichajalota)

 Twitter: [@RrichaJalota](https://twitter.com/RrichaJalota)

 Blog: medium.com/@rrichajalota234