

Hitarth Narvala

PHD | NLP | INFORMATION RETRIEVAL

♥India, UK

hnarvala.com



scholar.google.com/citations?user=3KORnrEAAAAJ

PROFILE

I am a PhD graduate in Computing Science, specialising in Natural Language Processing (NLP) and Information Retrieval (IR). I have over 11 years of extensive work experience in Data Engineering and Full-Stack development across Finance and Healthcare domains. I am actively seeking opportunities for an applied scientist role to drive innovative solutions and make meaningful contributions to real-world problems.

EDUCATION

PhD Computer Science

University of Glasgow, Glasgow IR Group, UK 2019 – 2024

- Supervisors: Prof. ladh Ounis and Dr. Graham McDonald
- Summary: Augmenting IR and NLP methods for identifying latent relations between documents to aid human sensitivity review that is performed to identify and protect sensitive information, such as personal or confidential information, in large collections of digital documents
- Innovation: Proposed novel methods for Knowledge Graph embeddings, Document Recommendation, Information Threading and Text Classification.
- *Reach:* The research is featured in various publications across top-tier international conferences, namely ACM SIGIR, EMNLP, ACM CIKM, ECIR and ACM CHIIR, along with a long article in the IP&M journal.

Extra-Curricular

- Assisted supervision of Level-4 and Master's projects focussed on Generative Large Language Models (LLMs), news recommendation, event extraction and automatic sensitivity classification.
- Organised the IR Seminars series (2022-2023) in the School of Computing Science, featuring renowned experts from the IR and NLP community.
- Currently serving as Local Chair and member of the Program Committee for the ECIR 2024 conference.

MSc Data Science (1st Division with Distinction)

University of Glasgow, UK 2018–2019

B.Tech. Computer Science (1st Division with Distinction)

Amity University Rajasthan, India 2008-2012

SKILLS

Data Science:

Machine Learning

Deep Learning

Information Retrieval (IR)

Natural Language Processing (NLP)

Information Extraction

Data Visualisations

Python (PyTorch, TensorFlow, numPy, Pandas, scikit-learn, spaCy, matplotlib)







Platform: Linux/Unix Shell Scripting

PROFESSIONAL EXPERIENCE

Research Database Manager – Full-stack Development

University of Glasgow - UK | Jan 2019 - Dec 2023

- Designed and developed web-based data collection tools and managed databases for research studies in the Population Health Research Facility.
- Introduced the capabilities of performing data analysis within the data collection tools with online statistical visualisations and reporting.
- Worked closely with researchers and business users to understand their data needs for effective database modelling.

Consultant – ETL Data Engineering

Exusia India Pvt Ltd, Client: United Health Group – India | May 2017 – Aug 2018

- Led the ETL data engineering team and contributed expertise to data warehousing projects.
- Achieved 70-90% performance optimisations in applications' runtime through data-flow analysis and parallel processing.
- Acquired functional understanding of Pharmacy Benefit Management, for improved contributions towards requirement analysis and design.
- Administered smoother project executions by assisting junior team members technically and functionally.

Technical Team Lead - ETL

Wipro Technologies, Client: Citi Bank – Singapore, India | May 2015 – May 2017

- Led a team of ETL developers involved in the Level 3 investigation into data and application issues.
- Delivered data warehousing projects and provided technical expertise to analyse and resolve critical application issues.
- Closely worked with business users for requirement gathering and to understand their concerns and provide solutions.
- Conducted face-to-face discussions with business users for requirement gathering, project planning, as well as training on existing project applications in multiple locations, namely Singapore, China, USA and Mexico.

Senior Project Engineer - ETL L3 Investigation

Wipro Technologies, Client: Citi Bank – Singapore | Sep 2014 – May 2015

- Analysed Level 3 production defects in ETL applications and implemented timely code and data fixes in high-pressure environments.
- Developed and delivered work orders independently, adhering to the full SDLC.
- Gained expertise in Financial Ledgers, enabling effective communications with business users regarding system architecture and process flow.
- Enhanced team learning through in-house training and mentoring of junior members.

Project Engineer – ETL Development

Wipro Technologies, Client: Citi Bank – India | May 2012 – Sep 2014

- Developed and delivered data warehousing projects.
- Attained technical and functional understanding of Electronic Cards business and in-depth knowledge of the process flow.

AWARDS

Winner, Code for Good - 2018 JP Morgan: Hackathon

Best Catalyst - 2017 *Exusia-UHG:* Advancing projects with innovative approaches.

Instant Karma - 2014 Wipro-Citi: Best Technical Expert

Bravo Choice - 2013 *Wipro-Citi:* Significant contributions to Finance Solutions.

CERTIFICATIONS

NVIDIA: <u>Fundamentals</u> of Deep Learning for <u>Computer Vision</u> – 2019

NVIDIA: <u>Fundamentals</u> of Accelerated <u>Computing with CUDA</u> – 2019

Oracle: <u>SQL Certified</u> <u>Expert</u> - 2010