

# Amit Kumar Jaiswal

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## EDUCATION

**University of Bedfordshire**  
England, United Kingdom  
PhD • 2018 - Present  
Quantum Information Retrieval

**University Institute of Engineering & Technology, CSJM University**  
Kanpur, India  
BTech • 2013 - 17  
Computer Science & Engineering

## CERTIFICATIONS

**Introduction to Deep Learning (Honors)**  
National Research University Higher School of Economics, Russia  
Coursera • March 2019

**Text Retrieval & Search Engines**  
University of Illinois at Urbana-Champaign  
Coursera • May 2019

**Mathematics for Machine Learning**  
Imperial College London  
Coursera • April 2020 - Ongoing

## COMPUTING

### Languages

Python • C/C++ • Bash • Scala • Perl • R • JS • Rust

### Cloud Platforms/Stacks

GCP • AWS • Azure • Kubernetes • Openshift/Openstack • Kubeflow

### Area of Interest

Machine Learning • NLP • Mathematical Physics • Computer Vision • Cloud Computing • Information Retrieval

### Operating Systems

Linux • Windows • MacOS

## LINKS

kaggle.com/amitkumarjaiswal  
github.com/amitkumarj441  
linkedin.com/in/amitkumarjaiswal1  
hackerrank.com/amit\_gkp

## HONORS & AWARDS

Full Travel Grant - Alan Turing Hackathon, Sept 2019  
Alan Turing Institute, London

Full Travel Grant - Alan Turing Hackathon, Aug 2019  
University of Bristol, United Kingdom

## EXPERIENCE

### University of Bedfordshire, England

Marie Curie Researcher • Apr 2018 - Present  
- Research focuses at the intersection of Interactive Information Retrieval and Information Foraging Theory

### University of Padova, Italy

Visiting Researcher • May 2019 - June 2019  
- Worked on applying Quantum IR techniques in image search tasks

### Google Code-In

Mentor at PostgreSQL • Oct 2018 - Dec 2018  
- Created and assisted "PostgreSQL, YML & Dockerfile - PostgreSQL as a microservice" task

### Google Code-In

Mentor at OpenWISP • Nov 2017 - Jan 2018  
- Assisted microservice and network related tasks.

### Open Mainframe Project - Linux Foundation

Summer Intern • Jun 2017 - Sep 2017  
- Enabled OpenStack support for z/VM  
- Benchmarked OpenStack functions and support matrix features [1]  
- **Mentor:** Kevin (Ji) Chen, **Co-mentor:** Emily Huguenburch

### Google Summer of Code

Summer Intern, Cloud Native Computing Foundation • 2017  
- Created and implemented a data model to standardize Kubernetes logs [1]  
- Tech stack: OpenShift, Kubernetes, Elasticsearch, Ruby, Fluentd, Kibana [1]  
- **Mentor:** Miguel Perez Colino, **Co-mentor:** Richard Megginson

### CapitalVia Global Research LTD, Indore, India

Software Engineering Intern • June 2016 - July 2016  
- Built a scalable web application for Visitor Management System [1] in PHP and JS.  
- Developed a scalable web app for Courier Management System [1] in PHP and JS.  
- **Mentor:** Rohit Gadia

### SuperProfs, Bangalore, India

Product Developer Intern • Jun 2015 - Jul 2015  
- Responsible for product development and quality assurance of IIT-JEE exam contents.  
- Acted as a mentor for JEE aspirants.

### Indian Institute of Management Ahmedabad (IIM-A), India

Campaign Associate • May 2015 - June 2015  
- Responsible for creation and translation of Educational videos  
- Acted as a lead developer of initiative "Scholars for Change"

### Centre for Monitoring Indian Economy, Mumbai, India

Research Analyst • Mar 2015 - Apr 2015  
- Analyzing and quantification of household data of Consumer Pyramids using time series - Normalized Consumer Pyramids data.  
- **Mentor:** Aditi Kadam

## PUBLICATIONS

Utilising Information Foraging Theory for User Interaction with Image Query Auto-Completion, European Conference of Information Retrieval (ECIR) • 2020

**Amit Kumar Jaiswal**, Haiming Liu, Ingo Frommholz

Information Foraging for Enhancing Implicit Feedback in Content-based Image Recommendation, ACM FIRE Conference • 2019

**Amit Kumar Jaiswal**, Haiming Liu, Ingo Frommholz

Fee Waiver - Search Solutions, 2018  
London, UK

Diversity Scholar - H2O AI Conf., 2018  
London, UK

Diversity Scholar - DockerCon, 2018  
San Francisco, US

Travel Grant - EthDenver Hackathon,  
2018  
Denver, US

Full Travel Grant -  
KubeCon+CloudNativeCon, 2017  
Austin, TX, US

Full Travel Grant - OpenStack  
Summit, 2017  
Sydney, Australia

Full Travel Grant - WikiToLearn India  
Conference, 2017  
Jaipur, India

Full Travel Grant - Mozilla Summit,  
2017  
India

## POSITIONS OF RESPONSIBILITY

Postgraduate Research  
Representative - University of  
Bedfordshire, • 2019 - Present  
Bedfordshire, United Kingdom

Co-Organizer - Global FinTech  
Conference, • 2019  
New Delhi, India

Organizer - Global Blockchain  
Conference, • 2018  
New Delhi, India

Representative - Mozilla  
Foundation, • 2016 - 2019  
India

Community Evangelist -  
GeeksforGeeks, • 2015 - 2017  
India

## PROFESSIONAL SERVICE

Web Chair  
CHILites (SIGCHI) 2019

Reviewer  
Machine Learning for Physical Sciences  
workshop, NeurIPS 2019

Reviewer  
Journal of Open Source Software (JOSS)  
2019

Sub-reviewer  
European Conference on Information  
Retrieval (ECIR) 2020

Semi-Supervised Learning for Cancer Detection of Lymph Node  
Metastases, Proceedings of Towards Causal, Explainable and Universal  
Medical Visual Diagnosis Workshop at CVPR • 2019  
**Amit Kumar Jaiswal\***, Ivan Panshin\*, Dimitrij Shulkin\*, Nagender Aneja, Samuel  
Abramov

Effects of Foraging in Personalized Content-based Image  
Recommendation, Proceedings of the 2nd EARS Workshop at SIGIR • 2019  
**Amit Kumar Jaiswal**, Haiming Liu, Ingo Frommholz

Identifying Pneumonia in Chest X-Rays: A Deep Learning Approach,  
Journal of Measurement • 2019  
**Amit Kumar Jaiswal**, P. Tiwari, S. Kumar, Deepak Gupta, Ashish Khanna, Joel J.P.C.  
Rodrigues

Investigating Interactive Information Retrieval via Information Foraging  
Theory, FDIA Workshop at ICTIR • 2018  
Amit Kumar Jaiswal

Quantum-like Generalization of Complex Word Embedding: A Lightweight  
Approach for Textual Classification, LWDA • 2018  
**Amit Kumar Jaiswal**, Guilherme Holdack, Ingo Frommholz, Haiming Liu

## PROJECTS

Pruning Neural Network • 2019  
Codebase: [https://github.com/amitkumarj441/nn\\_prune](https://github.com/amitkumarj441/nn_prune)

Quantum-inspired Word Embedding • 2018  
Contributed Codebase: <https://github.com/wabyking/qnn>

Capsule Network for Named Entity Recognition • 2018  
Codebase: [https://github.com/amitkumarj441/CapsRoute\\_NER](https://github.com/amitkumarj441/CapsRoute_NER)

Parsec: A web-scale state channel for the Internet of Value • 2017  
Codebase: <https://github.com/amitkumarj441/Parsec>

SQL Query Generator for Natural Language • 2017  
Codebase: <https://github.com/amitkumarj441/SQGNL>

## COMPETITIONS & HACKATHONS

Collaborative Telco Hackathon, Alan Turing Institute, London • Sept 2019  
Applied probabilistic modelling and ML for Bandwidth allocation on Saudi Arabia  
Telecom (STC) data

Collaborative Hackathon by Alan Turing Institute, London at University of  
Bristol • Aug 2019  
Applied ML/DL for Protein Folding

Google Landmark Retrieval, CVPR Workshop • 2019  
Codebase: <https://github.com/antorsae/landmark-retrieval-2019>

FGVC6 Workshop, CVPR • 2019  
Applied graph convolutional network with fine-tuning over 1.5K objects from  
museums art gallery (*code in preparation*)

Google Code Jam • 2018  
Qualified Round 2 (overall 4 Rounds)

IndiaHacks Hackathon, Bangalore, India  
Built Parsec (*Runner-up*, 2017)

Rajasthan E-Governance Hackathon, Jaipur, India  
Built ManhoodCoin based on Hyperledger (*FinTech Track Winner*, 2017)

EtherCamp Virtual Hackathon • 2016  
Built MultiSig Crypto Wallet (*Runner Up - Wepesa Team*)

## REFEREES

Available on request.