

# Akash Sharma

🌐 Website | 🐙 Github | 🔗 LinkedIn | 📝 Blogs | ✉ akashs | 📍 New Delhi

## EDUCATION

### IIIT DELHI

**BTECH IN COMP. SCIENCE**  
(+ minors in Social Sciences)  
2017 - 2021  
GPA: 8.7 / 10.0

### RYAN INTL. SCHOOL

Class 12th (CBSE)  
Percentage: 95%  
Class 10th (CBSE)  
CGPA: 10.0 / 10.0

## SKILLS

Over 5000 lines:

C++ • Python • Java • JS

**Web Development**

HTML • CSS • NodeJS

• Vue • React • Flask

MySQL • MongoDB

**Scripting**

MATLAB • Julia • R

• Go • PHP •  $\text{\LaTeX}$

**Tools & Tech. Used:**

Git • Shell Scripting • GCP

Azure • Redis • Elasticsearch

## ACHIEVEMENTS

- Codeforces - Expert (1601)
- CodeChef - 4 Star (1841)
- ACM ICPC Qual'18 - GR 224
- Snackdown Qual'18- AIR 53
- BVCOE Hackathon Winner'19
- SNU Hackathon Winner'18
- Letter of Appreciation - HRD Ministry - 2017

## COURSEWORK

Deep Learning

Machine Learning

Semantic Web

Data Structure and Algos

Computer Networks

Database Systems

Computer Security

Advanced Programming

Soft. Dev using Open Source

Computer Architecture

Operating Systems

Graph Theory

## EXPERIENCE

### MIDAS LAB | RESEARCH COLLABORATOR

SEPT 20 - PRESENT

- Researching in the field of Computational Psycho-linguistics with Columbia University. Working on development of an automated scoring system for oral proficiency for TOEFL

### PROGRAM ANALYSIS LAB | UNDERGRAD RESEARCHER

OCT 20 - PRESENT

- Collaborating with the Program Analysis Lab team and researching on the applications of Deep Learning techniques over Software engineering tasks.

### MATHWORKS | SOFTWARE ENGINEERING INTERN

MAY - JUN 20, REMOTE

- Worked on the development of a debugging tool for embedded code generation utilized by Simulink models through graphical visualization

### LBB | FULL STACK DEVELOPMENT INTERN

MAY - AUG 19, DELHI

- Understood the business requirements of the company & accordingly executed technology-based solutions & optimised performance of existing services
- Developed scalable application systems for the commerce platform

## PUBLICATIONS

### Improving Cross-Language Code Clone Detection via Code Representation Learning and Graph Neural Networks

Transactions on Software Engineering (TSE) 2021

- Proposed state-of-the-art semi supervised deep learning-based mechanism capable of detecting code clones across different programming languages.

### Learning Fine-Grained Cross Modality Excitement for Self Supervised Detection of Speech Disfluencies

ICASSP 2022

- Proposed a cross modality DL based excitement module to conduct sample-specific adjustment on multi-modality embeddings for detection of disfluencies using speech and text.

## RECENT PROJECTS

### Enveave - Open source Organisation 🌐

Dr. Pankaj Jalote

June 21 - Present

Formed an open source platform that aims at connecting ideas, combining efforts and enhancing collaboration among people for Environmental Conservation Initiatives.

### Disentangling Factors of Variation in Images with Cycle Consistent VAE 🌐

Dr. Saket Anand,

April 20 - May 20

Redesigned the novel architecture that disentangles the latent space into two complementary subspaces through Cycle-Consistent Variational Auto-Encoders for training DL models

### Visual Question Answering 🌐

Dr. Saket Anand, VQA Challenge 2020

March 20 - April 20

Developed multiple deep learning based models for the construction of a Visual question answering system for VQA Challenge of 2020.

### Twitter Data Analytics for Indian Elections 2019 🌐

Oxford University, IIM Kozhikode

March 19 - May 19

Developed a realtime analytics portal of Tweets from Indian politicians & parties, all actively scraped from Twitter & analysed for social-scientists & researchers.

📄 More of my projects and their descriptions are available at [akash-sharma-1.github.io](https://akash-sharma-1.github.io)