# Kartikey Tewari

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#### EXPERIENCE

Amazon June 2022 – Present

Bengaluru, India

Pune, India

CGPA: 8.50

CGPA: 8.15

CGPA: 10.00

92.8%

August 2017 - May 2022

May 2015 - May 2017

Software Developer Engineer 1

- Worked on Wireless Remote Locking platform and made the service compliant to DSAR and On-Demand Data Deletion policy.
- · Worked on Amazon Detail Page widgets, and built experiments to measure and improve customer experience.
- Built a SQL like abstraction layer using **Python** over **DynamoDB** that makes ad-hoc batch operations and data migration faster. It also supported parallelisation and had in-built support for deployment on **EC2** instances and **AWS Batch** compute.

Source.One May 2021 – August 2021

Software Developer Intern

- As part of back-end team, developed a Data Analytic Website from scratch for determining real time bottle-necks in logistics.
- Created Python scripts that mined data stored in AWS Glaciers, and generated logs based on them.
- Designed REST APIs using **Node**, to provide the mined data for use in analytic stack.

NIT Hamirpur

May 2020 – July 2020

Research Intern

Himachal Pradesh, India

• Designed a new tree based Data Structure and the algorithms to build and perform range-based queries on it.

- Implemented the proposed Data Structure and contemporary methods using C++ to determine the experimental efficiency.
- Reduced Time complexity for operations by 900% while reducing space complexity by 25% for storing data.
- Authored a research paper on the tree, that is published by IJIT, Springer Publications a SCOPUS Indexed Journal.

#### **EDUCATION**

#### National Institute of Technology, Hamirpur

Masters of Technology in Computer Science and Engineering Bachelors of Technology in Computer Science and Engineering

Completed Bootcamps on Udemy in MySQL, MEN Stack, Git and Github

#### Delhi Public School, Vidyut Nagar

Class-12 CBSE Examinations

Class-10 CBSE Examinations

PROJECTS

## Statistical Model for Text Summarisation

- Made a statistical model using Python to generate multi-document text summaries, that also took into account contextual meaning.
- This improved ROUGE-L F1-score on standard datasets by 1.8% over state-of-art machine learning algorithms.
- Authored a research paper on same, that got presented in CVMI conference conducted by IIIT Allahabad.

## Fingerprint Authentication System [Github]

- Built a fingerprint-based authentication system from scratch using C++ and Python scripts.
- Improved Data retrieval time by 20% compared to contemporary methods by using Wavelet tree for indexing.

## Yelpcamp [Github]

- Developed a website using Javascript where users can share there reviews of different campgrounds.
- Implemented functionalities such as user profiles and editing/deleting of comments.
- Used Node and ExpressJS for developing the back-end, and MongoDB for database management.

## **ACHIEVEMENTS**

#### **Scholarships**

- 2021: Cleared GATE Scholarship by securing top 2.3% marks nationally.
- 2017: Secured 100/100 marks in CBSE Class-12 Mathematics Examination, and got recognition by MOE, GOI.
- 2015: Selected as one of top 857 students among 14,00,000 candidates, for receiving the prestigious NTSE Scholarship provided by Government of India (GOI).

#### **Programming Contests**

- Codechef: [handle: kartikey30] Maximum rating: 1927 (4-star) Ranked in top 2.4% of all users on the website.
- Ranked 94th out of 5465 participants that competed in the Cook-off November 2020 contest.
- Ranked 120th out of 3284 participants that competed in the Cook-off September 2021 contest.
- Codeforces: [handle: kartikey30] Maximum rating: 1601 (expert) Ranked in top 3.2% of all users on the website.
- Cleared Qualification round and advanced to Round-1 of Codejam 2021. Ranked 3996th out of total 93,000 participants.

#### CO-CURRICULAR SKILLS

GLUG: Have been an active member of GLUG (GNU-Linux User's Group), and have conducted many workshops on Linux Tools.

## TECHNICAL SKILLS

Languages: C, C++, Java, Python, SQL, Bash, HTML, CSS and Javascript

Technologies/Frameworks: Linux, Git, GitHub, AWS IAM, DynamoDB, EC2, MySQL, MongoDB, Bootstrap and ExpressJS