

KARTIKEY TEWARI

Sector-76, Noida, Uttar Pradesh, India

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🔗 [kartikeytewari.github.io](#) 📄 [Kartikey Tewari](#) Codechef: [kartikey30](#) Codeforces: [kartikey30](#)

EXPERIENCE

Algotest (YC S22)

May 2023 – July 2023

Founding Backend Engineer

New Delhi, India

- Built a C++ library for calculating in real-time technical indicators of stock prices with **latency of less than 1ms**.
- Built and deployed in production the price feed service that sends data of instrument price to all internal services using **Python** and **Docker**. The pub-sub model was made using **Redis**. It has a **latency of less than 80ms** and is extremely reliable.

Amazon

June 2022 – March 2023

Software Developer Engineer 1

Bengaluru, India

- 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

Pune, India

- 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 **S3 Glaciers**, and generated logs based on them.
- Designed REST APIs using **NodeJS**, to provide the mined data for use in analytic stack. The data was stored in **MongoDB**.

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

August 2017 – May 2022

Masters of Technology in Computer Science and Engineering

CGPA: 8.50

Bachelors of Technology in Computer Science and Engineering

CGPA: 8.15

Completed Bootcamps on Udemy in [MySQL](#), [MEN Stack](#), [Git](#) and [Github](#)

Delhi Public School, Vidyut Nagar

May 2015 – May 2017

Class-12 CBSE Examinations

92.8%

Class-10 CBSE Examinations

CGPA: 10.00

PROJECTS

Statistical Model for Text Summarisation [[Github](#)] [[Paper](#)]

- 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 1.08% over state-of-art machine learning algorithms.
- Authored a research paper on same, that got presented in CVMI conference conducted by IIIT Allahabad.

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 **NodeJS** 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.
- 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, Javascript and NodeJS

Technologies/Frameworks: Linux, Git, GitHub, AWS IAM, EC2, S3, S3 Glacier, DynamoDB, MySQL, PostgreSQL, MongoDB and Redis