

Shashwat Kathuria

Computer Science
& Engineering,
IIT Jodhpur

Indian Institute Of Technology, Jodhpur
Bachelor Of Technology (Expected 2021)
3rd Year Undergraduate
CGPA : 9.14/10 (Till 4th Semester)

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GitHub : www.github.com/shashwatkathuria
Phone : +91 - 9971383462
Home : New Delhi, India

Interests

- Machine Learning
 - Cryptography
 - Android Application & Web Development
 - Data Structures And Algorithms
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Technical Skills

WEB DEVELOPMENT

- | | |
|--------------|--------------|
| - Django | - Flask |
| - HTML / CSS | - JavaScript |
| - PostgreSQL | - SQLite |
| - Bootstrap | - Jinja |

PROGRAMMING LANGUAGES

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|----------|-----------------------|
| - Python | - Java / Android Java |
| - C++ | - C |

UTILITIES

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|----------------|-------------------|
| - Git | - SSH |
| - Raspberry Pi | - Microsoft Azure |
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Projects

Natural Language Processing / Machine Learning, NLTK, Scikit

Programmed various Hindi Part of Speech taggers using **Hidden Markov Model** and **Viterbi's Algorithm (Bigram and Trigram)** and **Decision Tree Classifier Model** and achieved **92.85 %** accuracy.

IITJ HealthCare Centre / Software Engineering, Web Development

An online health care assistance portal made using **Django (Python)** and **Bootstrap (HTML / CSS / JavaScript)** to help students get online prescriptions from doctors and availability regarding medicines through medical store.

Disaster Safety App / Android Application, Web Development

Programmed an android and web application to broadcast and get online alerts regarding earthquakes, floods and hurricanes by communicating to the server, using **Flask (Python)** and **Android Studio (Java)**.

Cryptography / Python, C

Analyzed and programmed CBC **Padding Oracle** attack, hash verification of videos using **SHA-256**, CBC and CTR Modes **AES Decryption**, **Many Time Pass** hack along with a guessing heuristic, and various historic ciphers as a part of Cryptography I course under Professor Dan Boneh.

Data Structures And Algorithms / Python, C++, C

Programmed a total of 35 programs (and growing) in **Python**, **C++** and **C**, a major part of which was of the Stanford University Data Structures and Algorithms Specialization under Professor Tim Roughgarden.

Drag v/s Normal Projectile / PyLab - Python

Graphical comparison of drag and normal particle projectiles using **PyLab** library in **Python**.

Extra Courses

Data Structures And Algorithms Specialization / Stanford University

- Divide and Conquer, Sorting and Searching & Randomized Algorithms
- Graph Search, Shortest Paths & Data Structures
- Greedy Algorithms, Minimum Spanning Trees & Dynamic Programming
- Shortest Paths Revisited, NP-Complete Problems & What To Do About Them

Cryptography I / Stanford University

MIT 6.00.1x, Introduction to Computer Science and Programming Using Python / Massachusetts Institute of Technology

MIT 6.00.2x, Introduction to Computational Thinking and Data Science / Massachusetts Institute of Technology

CS50, Introduction to Computer Science / Harvard University

CS50, Web Programming with Python and JavaScript / Harvard University

Android Specialization / Google, Udacity

Education

G. D. Goenka Public School, New Delhi

Class 12, 2017

Central Board Of Secondary Education : **96%**

Class 10, 2015

Central Board of Secondary Education : **9.6 / 10**

**Scholastic and
Extracurricular
Achievements**

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- Former State Level Football Player, New Delhi
 - Football Inter - Zonals Winner, New Delhi
 - 4 - Time School Level Athletics Record Breaker
 - SAT Subject PCM Perfect Scorer - 2400 / 2400
 - SAT Score - 2100 / 2400
 - 3 - Time Scholastic Excellence Awardee
 - School Topper, Class 12 CBSE Exams
 - Participated in Various Olympiads, Trekking Camps

**Positions of
Responsibility**

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- Vice Sports Captain, Class 11
 - Sports Captain, Class 12
 - Participated in Various NGOs
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