

## EDUCATION

### Bhopal, M.P. National Institute of Technology 2016 – Present

- Bachelor of Technology in Computer Science & Engineering. Expected Graduation 2020. **GGPA: 8.4/10**
- Research Interests & Expertise: Software Engineering, Machine Learning (DL, CV, and RL), Software Security.

### Bhopal, M.P. Board of Secondary Education 2015

- Intermediate / +2. Marks: 93.8%. District Rank 3 and overall rank in the state < 15 among 500 K students.
- Received INSPIRE scholarship by Government of India for being under top 1% from all across the India.

## MAJOR ACADEMIC PROJECTS (SELECTED)

### Web Browser Security Framework Security [github.com/jishanshaikh4/jaam](https://github.com/jishanshaikh4/jaam)

- Survey of browser security (attacks and preventives), & development of framework for security concerns.
- Trained a model for malicious URL detection using Logistic Regression, and developed a tool (Tkinter) for it.
- Technologies: Python and Tkinter. Minor (CSE-319 & 329). Dr. Deepak Singh Tomar. GPA: 9.79/10 and 9.38/10

### Image Segmentation Optimization Computer Vision [github.com/jishanshaikh4/is-cv](https://github.com/jishanshaikh4/is-cv)

- Devised a new technique for supervised and unsupervised image segmentation of state-of-the-art results.
- Paper manuscript ready to be published on CVPR 2020 or ICCV 2020. Published on arXiv (Sooner).
- Technologies: Sklearn, Python, OpenCV, Jupyter notebook. Seminar (CSE-418). Dr. Jyoti Bharti. GPA: 10/10

### Chess AI using Min-Max Artificial Intelligence [github.com/jishanshaikh4/chess](https://github.com/jishanshaikh4/chess)

- Implemented Min-Max algorithm with alpha-beta pruning + Depth Limited Search at  $d = \{1, 2, 3, 4, 5\}$ .
- Imparted with positional matrix evaluations for each piece resulting in a player with ELO > 1900 at  $d = \{4, 5\}$ .
- Technologies: JavaScript, chess.js, chessboard.js. AI (CSE-327). Dr. Mansi Gyanchandani. GPA: 9.5/10

### School Administration System Language (PHP) [github.com/jishanshaikh4/sas](https://github.com/jishanshaikh4/sas)

- Created a minimally styled system for almost all the school facilities using fundamental PHP programming.
- Technologies: PHP, HTML, CSS, JavaScript. Java/PHP (CSE-228). Dr. Yatendra LR Sahu. GPA: 10/10

## TECHNICAL EXPERIENCE (OPEN SOURCE)

### Projects

- **Metro System Database Management** (2017). UI & UX developed using custom databases. *SQL, HTML, CSS*.
- **lib-math** (2017 – ). Library in C with 500+ interfaces include statistics & cryptography. Portable to *Python 3.8*.
- **Speed Video** (2019). Video player with 6x speed facility and Picture in picture support for Firefox. *JavaScript*.
- **Material Design** (2016 – ). Open design solutions such as textbook title pages, book format, file icons, etc.

### Research

- **JAAM Paper** (2018 – 19). JAAM: Web Browser Security Framework. [PDF](#). [Prof. Deepak Singh Tomar]
- **Segmentation Paper:** (2019 – ) Image Segmentation Optimization Technique. [LINK](#). [Prof. Jyoti Bharti]
- **Metro Paper** (2017 – 18). Metro System Database Management. [PDF](#). [Prof. Sweta Jain]
- **Planning Paper** (2017 – ). Security Issues in Software Planning Process. [LINK](#). [Independent]

## ADDITIONAL EXPERIENCE AND AWARDS

- **National Cadet Corps (NCC):** (2016 – 19) Rank L. Corporal, Dance Coordinator, and Senior core team member.
  - Earned C (with A grade) and B (with B grade) certificates from NCC Directorate MP/CG, India.
  - Attended 3 annual camps comprising 2 National Camps (NIC and AITC) and 1 Training camp (CATC).
  - Won 2 National Gold medals (1 individual and 1 team) at NIC, Maihar among 600 Cadets from all over India.
- **Scholarships:** Merit-cum-means and INSPIRE (by Indian govt.) & Encouragement and CM Merit (by State govt.)
- **Online Profiles:** Github, LinkedIn, Youtube, Twitter, Dribbble, Hackerrank, Interviewbit, Codechef, Lichess.

## LANGUAGES AND TECHNOLOGIES

- C++; C; Java; Python; Objective-C; C#.NET; SQL; JavaScript; PHP;  $\text{\LaTeX}$ ; HTML; CSS; MATLAB; etc.
- VS Code; Atom; Kraken; GEdit; Eclipse; Netbeans; JetBrains Toolbox; Octave; OBS; etc.