



Nautatava Navlakha  
**Indian Institute of Technology Bombay (B.Tech)**  
 Majors: Civil Engineering  
 Minors: Computer Science and Engineering

<https://nautatva.github.io> ☹  
 nnautatva@gmail.com ✉  
 +91 827 526 9688 ☎  
 Mumbai 📍

## INTERNSHIP EXPERIENCE

Summer Associate | Finmechanics India Pvt. Ltd. [May '19 - Jul'19]

*Automating cross-asset platform for trade pricing, risk, compliance, and processing*

- Received a **Pre-placement Offer** for exceptional performance over the course of internship as a summer associate
- Wrote scripts and created **self-updating** views for data visualizations on staging and production environments
- Developed Bond Master template from scratch using ExtJS; API written in Java with Spring, Hibernate and Hazelcast
- Validated Credit Default Swaps taking into consideration **ISDA standards** and verified results with **Markit** calculator

MERN Stack Developer | Skillate Industries Pvt. Ltd. [May '18 - Jul'18]

*A job-matching platform for enterprises to make the recruitment process hassle-free using artificial intelligence*

- Implemented **Progressive web application** using React JS. Integrated Google Analytics, Google Jobs and SEO
- Used **Server-Side Rendering** and **service-worker** for faster loading times and offline functioning of the application

SEO analyst | Toppr Learning | Haygot Education Pvt. Ltd. [Dec '17 - Jan'18]

*An online practice platform helping students prepare for IIT JEE, PMT, school boards, and other competitive exams*

- Achieved **50% increase in organic traffic** by the end of internship period by studying keywords, competitors and backlinks using tools like Google Webmasters, Ahrefs, and SEOquake to provide creative and effective SEO solutions

## COURSE PROJECTS

Computer Intelligence	• Wrote a python program to deliver proof of concept of the paper: Bernoulli Random Forests: Closing the Gap between Theoretical Consistency and Empirical Soundness ['19]
Full-stack development	• Developed a 3-tier surveying model to improve the administration of surveys. Used the app model to find studying trends of 117 people from different academic programs ['19]
Optimizing problems	• Verified <b>algorithm of congestion control</b> for Reno-TCP to transfer packets in least time • Used <b>Bellman-Ford algorithm</b> to find the shortest distance between any two points ['17]
Multithreading in networks	• Programmed server with C++, which is capable of managing multiple clients simultaneously. All clients store data in a common DB after doing a consistency check in real-time ['17]

## TECHNICAL SKILLS

**Programming Languages** C/C++, Python, Bash, SQL, Java (OOP, Android Studio), MATLAB, GoLang  
**Web Development** HTML, CSS, JavaScript (Vanilla, Angular, React, Express), MongoDB, Pug

## POSITIONS OF RESPONSIBILITY

Institute System Administrator | IIT Bombay [Apr'19]

*Interface between Computer Center and Hostel system administrators. Responsible for maintenance of gymkhana servers*

- Entrusted with responsibility of **maintenance and upkeep of Gymkhana servers**, ensuring minimal downtime
- Improved Efficiency by **40%**, got almost **0% downtime** by moving and maintaining the student software infrastructure from virtual machines to **LXC containerized deployments** in Proxmox Virtual Environment
- One of the only **two** students to overseeing institute-wide router and internet **security to prevent cyber-attacks**
- Automated room allotment system by developing python scripts to allocate freshers based on given rules efficiently

Department Head | Web and Finance | National Service Scheme [Apr'18]

*NSS is the largest student volunteer body of IITB, serving >100K people nationwide via public welfare activities*

- Designed a new website for NSS with a perfect audit score of 100 for SEO, performance as well as Best practices on every page. Audits done using Google Lighthouse. Analytics reports proved a **y-o-y user bump of 106.3%**

Department Academic Student Mentor | Civil Engineering [Apr'18]

*Part of a 24-member team selected for improving the academic atmosphere inside the campus*

- Providing counsel for holistic development primarily for students needing Academic rehabilitation in campus
- Reselected taking into consideration the **excellent performance in mentorship** for the previous academic year

## SCHOLASTIC AND EXTRA-CURRICULAR ACTIVITIES

Awards	• Bagged the <b>second runner up</b> in logo design in Freshmen competition "Freshiezza" ['16] • Made a science fiction movie <b>CODEBREAKER</b> in a team of 5. Fully funded by institute ['16]
Social	• Co-organised "CURED"- a PAN India Social Initiative spreading diabetes awareness ['17] • Completed 80+ hours of community service such as teaching in NGO's as NSS volunteer ['16]
Scholastic	• Awarded the NSTSE scholarship 3 times with AIR 114 and State rank 4 in 2016 ['12, '13, '16] • Attained scholarship for two years in the Maharashtra Talent Search Exam [MTSE], awarded special prize in pre-matric ['12, '13]
Technical	• Spearheaded a team of 4 to make a compact bot controlled by android app via Bluetooth ['16] • Scraped data from institute internship blog and explored data for internship trends ['18]