

# Jyotishmaan Tripathi

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## Education

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**Birla Institute of Technology and Science**, Pilani, India August 2015–July 2020 (Expected)

- Bachelor of Engineering in Electrical and Electronics.
- Master of Science in Mathematics.
- Coursework includes Operating Systems, Object Oriented Programming, Microprocessors, Probability and Stochastic Systems, Linear Algebra, Multivariable Calculus and Operations Research.

## Experience

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**Software Development Intern**, Sling TV, Bangalore May 2019–Present

- Worked on the integration of the commercial skipping feature - AutoHop for AirTV classic.
- Developed scripts to automate the process of migrating the metadata required for commercial skipping from Dish ecosystem to Sling ecosystem.
- Worked with Python, HTTP requests, FTP server requests and JSON.

**Software Development Intern**, Tecture, Nagpur December 2017–January 2018

- Designed and developed a web application prototype for clients to create 2D plans which are converted to 3D Revit models made of prefabricated components using Revit API.
- Used Java, HTML/CSS, MySQL and Google web toolkit.

**Research Intern**, Solid State Physics Lab, DRDO, New Delhi May 2018–July 2018

- Designed an ultra-wideband low noise amplifier using resistive feedback topology which is comparable in performance to distributed amplifiers but with significantly reduced power consumption.

## Projects

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**Foreground segmentation in HEVC encoded videos** January 2019–May 2019

- An approach to detect motion of objects using residual data in HEVC encoded videos. The residual data represents the texture information of the signal to be coded.
- The algorithm was tested for videos with jitter and dynamic backgrounds.
- Used MATLAB, ffmpeg and GITL HEVC Analyzer.

**Quiz Generator** January 2019

- A tool that enabled one to randomly generate a quiz test questionnaire containing the specified number of questions from the question bank.
- Used Java, Swing, MySQL and Java Database Connectivity API.

## Activities

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**Teaching volunteer, People for Human Dignity**, New Delhi May 2016–December 2017

**Hostel Sports Secretary and Member of Sports Union**, BITS Pilani August 2018–May 2019

**Captain, Swimming Team**, BITS Pilani November 2017–May 2018

## Skills

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### Programming Languages and Frameworks

- Java, Python, HTML/CSS, JavaScript, Bootstrap, MATLAB, Git, L<sup>A</sup>T<sub>E</sub>X.

### Concepts

- Object-Oriented Programming, Data Structures and Algorithms, Mathematical Reasoning, Teaching.

### Languages

- English, Hindi.