

# MILIND LUTHRA

CSE Sophomore, IIT Kanpur

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## Academic Qualifications

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Cumulative Performance Index	(Till Semester 2)	10.0/10.0
JEE(Advanced)	2015	All India Rank 934
JEE(Mains)	2015	216/360 Marks
KVPY	2014-15	Qualified
Class XII(Maharashtra Board)	2015	87%
Class X(CBSE)	2013	10.0/10.0

## Skillset

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Proficiency	JavaScript, HTML/CSS, Python, Java, Linux(Debian), Emacs, OpenCV
Exposure	C/C++, SQL, Nodejs, $\text{\LaTeX}$ , Linux(Arch), Photo Manipulation, Git

## Projects

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### Autonomous Chess Playing Robot (ACPR)

Winter 2015

I worked on *Image Processing* for Autonomous Chess Playing Robot under Robotics Club, IIT Kanpur. The aim was to detect a chessboard and player moves, using a webcam mounted over the board. We used *OpenCV* with C++ to achieve this. The project could only be partially completed due to a non-availability of parts.

Git: [github.com/milindl/acpr](https://github.com/milindl/acpr)

### WebSockets Based MAFIA

Summer 2016

MAFIA is a game commonly played by people in large groups. It has several inherent problems I aimed to solve while making this multiplayer, web-based game.

I implemented a WebSocket server conforming to the WebSocket Protocol([RFC6455](https://tools.ietf.org/html/rfc6455)) from scratch in Python, as most existing implementations lacked what I wanted. I used this server to write a Python back-end for the MAFIA game. To play the game, I made a web-client based on JavaScript, HTML and CSS.

This project was further extended in the form of an Android Application in Google DevFest 2016, IIT Kanpur, along with two other people.

Git(server): [github.com/milindl/learning-websockets](https://github.com/milindl/learning-websockets)

Git(MAFIA Backend and WebClient): [github.com/milindl/mafia-reloaded](https://github.com/milindl/mafia-reloaded)

Git(Android Client): [github.com/11000011/Mafia-Android](https://github.com/11000011/Mafia-Android)

## Other Activities

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- **Takneek 2016:** Led the Hall to victory as the Hall Captain in Takneek'16, the interhostel science and technology competition.
- **Debate and Discussion Society:** Active part(Secretary) of the debate and discussion society of IITK.
- **Programming Club:** Active part(Secretary) of the Programming Club, IITK.
- **Code.Fun.Do:** Took part in Microsoft Code.Fun.Do 2015. Our team made a Windows Universal Application to aid the education of underprivileged children. We were selected as one of the five teams for "best idea."