

# LUTHRA MILIND VIKAS

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## EDUCATIONAL QUALIFICATIONS

|       |   |  |                 |
|-------|---|--|-----------------|
| 2015- | BTech, Computer Science and Engineering | Indian Institute of Technology, Kanpur | CPI: 9.68/10    |
| 2015  | HSC, Maharashtra Board                  | Dr.Kalmadi Shamrao High School, Pune   | 87.54%          |
| 2013  | AISSE, CBSE                             | SES Gurukul, Pune                      | CGPA: 10.0/10.0 |

## PROJECTS

### Using a Liveness-Based GC

*Undergraduate Project • Guide: Prof. Amey Karkare*

- Compared liveness-based and conventional reachability-based GCs (Garbage Collectors) in terms of speed/effectiveness.
- Came up with an idea for practical liveness-based GC using profile guided compilation step.
- Created a profiler to instrument a JVM (Java Virtual Machine) identifying objects which would be uncollected by conventional GCs.
- **Report:** [home.iitk.ac.in/~milindl/cs396a/](http://home.iitk.ac.in/~milindl/cs396a/)

### Dashboard Extension/Webapp

*March 2017 • InterIIT Tech Meet*

- Developed an extension for Chrome/Firefox, and a web UI for a dashboard for IITK students to act as a centralized umbrella for various services.
- Used **dockerized microservices** written in Golang, NodeJS, Python communicating using JSON RPC. The frontend used Angular2.
- Adjudged the **first** amongst all IITs taking part
- **Github:** [yashsriv/beethoven](https://github.com/yashsriv/beethoven)

### Mafia WebApp

*September 2016*

- A companion webapp for the party game Mafia.
- Implemented **RFC6455** (WebSocket protocol) from scratch.
- Wrote a server in Python, a web-based frontend. Extended this to write an Android App as a part of Google DevFest 2016.
- **Github:** [milindl/mafia-reloaded](https://github.com/milindl/mafia-reloaded)

### Mao

*6<sup>th</sup> Semester • Course Project*

- A card game allowing new rules to be added at runtime, implemented in Haskell.
- **Github:** [milindl/mao](https://github.com/milindl/mao)

### PoGo

*6<sup>th</sup> Semester • Course Project*

- Golang to x64 compiler, written in C++.
- **Github:** [prannayk/CS335](https://github.com/prannayk/CS335)

### Autonomous Chess Playing Robot+

*Winter 2015 • Robotics Club, IITK*

- Image processing using OpenCV 2.4.

### Microsoft Code.Fun.Do

*September 2015*

- Was adjudged as one of the **best five ideas**.

## ACADEMIC ACHIEVEMENTS

- **Academic Excellence Awards** for 2015-16, 2016-17 from IIT Kanpur.
- **JEE Advanced 2015** All India Rank **934**.
- Qualified **Kishore Vaigyanik Protsahan Yojana 2015**.

## WORK EXPERIENCE

### Flipkart, Bangalore

*Summer 2018 • Pricing and Promotions Platform*

- Created user friendly debug console aggregating data from multiple microservices and providing a consolidated view of an offer status/visibility.
- Wrote scripts to migrate offer/pricing data and generate pricing reports.
- Technologies Used: Python, JavaScript, Bash
- Exposure: Kafka, Storm, RabbitMQ

### Open Source Contributions

- Contributed to the Toolkit component used by Mozilla Firefox (Bookmarks and History, OS.File).
- Code on [mozilla-central](https://github.com/mozilla-central).

## SKILLS

- **Languages:** JavaScript, Python, Java, Go, C++
- **Technologies:** Node, Angular, Docker, SQL
- **Utilities:** Git/Hg, Emacs, L<sup>A</sup>T<sub>E</sub>X, Linux, Shell
- **Exposure:** Haskell, Rails, MongoDB

## RELEVANT COURSES

Introduction to Programming<sup>1</sup>, Discrete Mathematics, Introduction to Logic, Abstract Algebra, Data Structures & Algorithms, Computer Organization, Algorithms II, Operating Systems, Theory of Computation, Compiler Design, Functional Programming, Computer Systems Security, Computing Laboratory 1<sup>1</sup> & 2<sup>1</sup>, Advanced Compiler Optimizations<sup>2</sup>, Computer Networks<sup>2</sup>, Principles of Programming Languages<sup>2</sup>

<sup>1</sup>: A\* grade, exceptional performance. <sup>2</sup>: Ongoing.

## CO-CURRICULARS

- Coordinator *2017-2018*, Programming Club, IITK
- Secretary *2016-2017*, Programming Club, IITK
- Secretary *2016-2017*, Debate Society, IITK
- Participant, IITPD (*IIT Delhi, 2016*)
- Participant, NUJS PD (*Kolkata 2017*)
- Within top 15 teams in India in CSAW'16 CTF