

# Sourya Kakarla

3rd Year CSE Undergraduate, IIT Kharagpur

## Education

**2012–2017 Computer Science and Engineering (Dual Degree)**, IIT Kharagpur, W.B.

CGPA: 8.69/10(at the end of 4th semester)

**2010–2012 Intermediate**, Sri Chaitanya Junior College, Hyderabad, Telangana.

Aggregate: 94.7%

**2010 Secondary School**, V.P.S Public School, Vijayawada, Andhra Pradesh.

CGPA: 10/10

## Experience

**2014 Intern**, Advitech Infotech Pvt Ltd, Hyderabad, Telangana.

- Worked on MEAN Stack to develop a social webapp for professionals.
- Primarily worked on the server side - using `node.js` and `mongoDB`.
- Designed the database schemas on `mongoose` for `mongoDB` for the social network.
- Used `Express.js` for url routing and `socket.io` for real time updates .
- Implemented the connections part, user groups and admin policy for groups, persistent and real time notifications. Worked on both the front-end and back-end.
- Implemented a chat server, newsfeed, and email service - was responsible for the back-end.

## Projects

**2014 Automated Restoration of Torn Documents**, Opensoft, IIT Kharagpur.

- Team(of 7) secured bronze medal in the competition.
- Used `openCV` on `Python` for image processing.
- Was primarily responsible for the GUI - implemented using `PyQt` - a python wrapper for `Qt`.
- Implemented drag and drop functionality to upload and remove images, implemented animation effects for loading - using `PyQt`.
- Back-end - Implemented a function to calculate Overlapping Area of two polygons using `Polygon` module.
- Github repo: [github.com/ma08/OpenSoft14](https://github.com/ma08/OpenSoft14).

**2014 Chrome Link Copy**, A google chrome extension.

- Google Search results and links(sent/received) in Facebook Chat are redirection urls. Using chrome's inbuilt Copy Link Address option, the redirection url is copied instead of the actual url the user intended to copy.
- This extension is created to solve this problem by adding another option in the context menu - Copy real link. Using this option, the intended link is copied instead of the redirection url.
- Built using `JavaScript` and `jquery` in chrome's extension API. Used `regex` to extract the original url from the redirection urls Facebook and Google create.
- Github repo: [github.com/ma08/chrome-link-copy](https://github.com/ma08/chrome-link-copy).

- 2013 **CASE(Computer Aided Software Engineering) Tool**, Software Engineering Project.
- Developed using Java for Software Engineering Course by a team of 2. A tool used to create(draw) data flow diagrams, modules, hierarchies etc.
  - Primarily used the Swing library to create the GUI to create the diagrams.
  - Automatic generation of Data Dictionary and checking of Balancing Error.
  - Implemented save and load operations for the diagrams using Serialization.
  - Github repo: [github.com/ma08/CASE](https://github.com/ma08/CASE).

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## Technical Experience

### Proficient With

languages C, C++, JavaScript, Python  
technologies node.js, mongoDB, Vim, Git, socket.io, Linux(Ubuntu)

### Have Experience With

languages Java, Bash, Lua, VHDL  
technologies GAS(GNU Assembler), Angular, ~~TeX~~TeX, jekyll, gimp, Windows

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## Relevant Coursework

### IIT Kharagpur.

Programming and Data Structures, Algorithms-1, Discrete Mathematics, Switching Circuits, Software Engineering, Signals and Systems, Probability and Statistics, Formal Languages and Automata Theory, Compilers\*, Computer Organization and Architecture\*, Algorithms-2\*, Graph Theory\* \*To be completed before Dec 2014

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## Activities

- 2013–2014 **Football Team**, *M.S.Hall*, IIT Kharagpur.  
Member of Gold Winning Team , M.S.Hall in the Sports General Championship.
- 2012–2013 **Member, KGPIan Game Theory Society**, *IIT Kharagpur*.  
Studied various aspects of Game Theory and its applications.
- Published an article on Burning Bridges in the Football Transfer Market in The Strategist, the magazine of the society.
  - Organized an event, War of Wits in IIT Kharagpur. Came up with the idea of the Centipede Game which hugely contributed to the success of the event.
- 2008–2010 **Football Team**, *V.P.S Public School*.  
Part of school team in 9th and 10th class. Took part in an Interschool Tournament and reached the semifinals.