

Sourya Kakarla

3rd Year CSE Undergraduate, IIT Kharagpur

MW-304, M.S.Hall, IIT Kharagpur

☎ (+918343997373)

✉ sourya4@gmail.com

📄 ma08.github.io/about

👤 [ma08](#)

[stackoverflow/ma08](#)

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.
- 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 Automosaicing of Torn Images, Opensoft Competition, 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.

2014 chrome-link-copy, A google chrome extension.

- Google's search results' and Facebook Chat links 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.
- Used `regex` to extract the original url from the redirection urls Facebook and Google create.
- Built using `JavaScript` and `jquery` in chrome's extension API.
- Github repo: 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.

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

Relevant Coursework

IIT Kharagpur

Programming and Data Structures, Algorithms-1, Discrete Mathematics, Switching Circuits, 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

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.