

Sourya Kakarla

3rd Year CSE Undergraduate, IIT Kharagpur

Education

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

CGPA: 8.47/10(at the end of 6th 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

2015 ChatterBox.

- A chat organizing application which makes navigating/accessing chat history easier by indexing and providing various other utilities. Developed by a team of 4.
- Built a web application using `node.js`, `mongoDB` and `Angular` for GES Hackathon organized by IBM. Secured 2nd place in the hackathon.
- Built a Windows Store app for Microsoft's Code.Fun.Do hackathon. Secured 1st place in the Kharagpur competition.
- Was primarily responsible for the backend(server and database).

2015 PlotIt, Opensoft, IIT Kharagpur.

- Team(of 10) secured 4th place in the competition.
- Developed in `python`. Used `sympy`, `matplotlib` and `mayavi` for plotting.
- Was primarily responsible for integrating `sympy` and `mayavi`'s plotting interface with the GUI built using `PyQt` - a `python` wrapper for `Qt`.
- Implemented plotting explicit, implicit and parameteric equations in 2D and 3D. Inequalities are supported in 2D
- The plotted graphs can be exported to various file formats such as `png`, `jpg`, `pdf`, `eps` etc.

- 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.
- 2014 **Chrome Link Copy**, A browser extension.
- Google Search results and links(sent/received) in Facebook Chat are redirection urls. Using a browser'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.
 - Implemented for Google Chrome and Mozilla Firefox.
 - Github repo: github.com/ma08/chrome-link-copy, github.com/ma08/firefox-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, Java
technologies node.js, mongoDB, Git, socket.io, Linux

Have Experience With

languages Bash, C#
technologies GAS(GNU Assembler), Angular, ~~TeX~~, jekyll, gimp, Windows

Activities

- 2013–2015 **Football Team**, *M.S.Hall*, IIT Kharagpur.
Member of Gold Winning Team , M.S.Hall in the Sports General Championship '15.
- 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.