

## EXPERIENCE

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|--|-------------------------------|-------------------------------|
| <b>Google Summer of Code Student</b>   | <b>Mozilla Firefox</b>        | <b>May 2018 - August 2018</b> |
| <ul style="list-style-type: none"><li>Implemented a mechanism to prevent multiple downloads from bombarding the Firefox browser</li><li>Blog : <a href="http://sagarbharadwaj.me/Download-Spam-Protection-Blog/">http://sagarbharadwaj.me/Download-Spam-Protection-Blog/</a></li></ul> |                               |                               |
| <b>Software Engineering Intern</b>   | <b>Intuit India</b>           | <b>May 2018 - July 2018</b>   |
| <ul style="list-style-type: none"><li>Built a real time data pipeline to consume, store and analyze real time database operational metrics</li><li>Used open source tools like Apache Kafka, Druid and RabbitMQ to build the project infrastructure from scratch</li></ul>             |                               |                               |
| <b>Software Engineering Intern</b>   | <b>Samsung India, R&amp;D</b> | <b>May 2017 - July 2017</b>   |
| <ul style="list-style-type: none"><li>Unified Time Division Duplex (TDD) and Frequency Division Duplex(FDD) code bases written for Shannon chipsets and achieved 30% code size reduction using C parser scripts in Perl</li></ul>  |                               |                               |

## EDUCATION

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|---|---|-----------------------|
| <b>B. Tech</b>  | <b>National Institute of Technology Karnataka</b> | <b>2015 - Present</b> |
| <ul style="list-style-type: none"><li>Major in Computer Science. Senior year. <b>CGPA : 9.36/10.00</b> (October 2018).</li><li>Relevant Courses: Data Structures and Algorithms, Computer Organization and Architecture, Operating Systems, Object Oriented Programming (C++), Computer Networks, Concrete Mathematics, Database Management System, Heterogeneous parallel computing, Compiler design</li></ul> |   |                       |
| <b>Senior Secondary School</b>  | <b>Sri Sri Ravishankar Vidya Mandir</b>           | <b>2013 - 2015</b>    |
| Class 12 examination : 96.8 % (CBSE), School topper, Scored 99/100 in Computer Science  |   |                       |

## PUBLICATION

**Automated Recognition and Processing of Handwritten Mathematical Equations**, In proceedings of IEEE 4th International Conference for Convergence in Technology (**I2CT 2018**)

## SELECTED PROJECTS

ALL PROJECTS ON [GITHUB](#)

- EYantra Snakebot** : Team of 4 designed, 3D printed and programmed a snake robot for a national level robotics competition. Positioned 1st out of 200+ participating teams <https://github.com/SagarB-97/EYantra-Snake-Robot>
- Handwritten Equation Solver** : An application to solve handwritten mathematical equations using deep learning algorithms. <https://github.com/Handwritten-Equation-Solver/Handwritten-Equation-Solver>
- OS Simulator** : A web app that simulates various functions of an Operating System. It is built using the Django web framework and uses Python for backend calculations. <https://github.com/OS-Simulator/OS-Simulator>
- Grape** : Grape is an android application which functions as an event manager with Augmented Reality features. It is coupled with a web application and cloud database. <https://github.com/SagarB-97/Grape>
- Parallel Programming** : Parallelized a number of algorithms including Convolution, Image Blurring, Mono color conversion etc using CUDA. <https://github.com/SagarB-97/CUDACodes>
- Low rate TCP DoS Attack** : Simulated a Low-Rate TCP DoS Attack in ns-3. Achieved by exploiting RTO in congestion control algorithm implemented in TCP Reno <https://github.com/SagarB-97/Low-Rate-TCP-DoS-Attack>
- Online Quiz Platform**: Developed a platform using nodejs to automate and hasten the process of setting, attempting and evaluating tests in colleges. <https://github.com/SagarB-97/Online-Quiz-Platform>

## ACHIEVEMENTS

- Ranked **2nd** in India and **102nd** globally in **IEEEXtreme 11.0**, a 24 hours global coding contest
- Winner of E-Yantra 2018 (Spotter snake theme), a national level robotics competition
- Ranked **2nd** in India and **214th** globally in **IEEEXtreme 10.0**, a 24 hours global coding contest
- Ranked **1515** in India in JEE Mains 2015 out of 1.3 million candidates. **Percentile Score : 99.57**

## INTERESTS AND ACTIVITIES

- Open Source Enthusiast.
  - Contributed many patches to Mozilla Firefox
  - Contributing to a few repositories on **Github**. Listed as one of the official authors of SymPy, a Computer Algebra system.
- Secretary of **Web Enthusiasts Club, NITK** - Restructured recruitment procedure. Organized a week long open source talk series.
- Executive Member of **IEEE NITK** - Mentored and completed projects spanning many areas of interest for 3 years
- Computer Science projects head, **Technites** (a technical fest), NITK