Ketan **Gupta**

COMPUTER SCIENCE UNDERGRADUATE · OPEN SOURCE ENTHUSIAST

G-46, Govind Bhawan, IIT Roorkee, Roorkee-247667, Uttarakhand, India

(+91) 9458159635 | ketangupta1897@gmail.com | ketangupta.in | ketanhwr | ketanhwr

Education

Indian Institute of Technology Roorkee   *Roorkee, India*

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING   *July 2015 - PRESENT*

- Cumulative Grade Point, CGPA: 8.37/10

Achievements & Scholarships

2018	**1st Place**, Inter IIT Tech Meet - Orbital Simulator	*IIT Madras*
2017	**Google Summer of Code**, Participant	*India*
2016	**39th Place**, ICPC Amritapuri Regionals	*Bangalore, India*
2016	**32nd Place**, ICPC Chennai Regionals	*Chennai, India*
2016	**17th Place**, IndiaHacks Game Development Sprint; 10,000 participants	*Bangalore, India*
2015	**All India Rank 448**, Joint Entrance Exam Advanced; 150,000 candidates	*India*
2015	**All India Rank 271**, Joint Entrance Exam Mains; 1.5 million candidates	*India*
2015	**International Olympiad of Informatics Training Camp**, Qualified INOI	*Bangalore, India*
2011	**NTSE Scholarship Awardee**, Government of India	*India*

Work Experience

Elanic   *Bangalore, India*

BACKEND DEVELOPER INTERN   *December 2017*

- Optimised the existing chat server by modifying schema and refactored code.
- Worked in Node.js and Mongoose.

Google Summer of Code 2017   *Work from Home*

TILED MAP EDITOR   *May 2017 - PRESENT*

- Contributed towards the launch of Tiled 1.0 and 1.1
- Added support for Infinite Maps, so that tiles can be drawn without worrying about the boundaries.
- Added Layer Locking and Move Selection feature. Also made a lot of improvements in Polygon Editing Tools.
- Worked in C++ and Qt Framework along with professional game developers.

Projects

Exylus github.com/ketanhwr/exylus   *IIT Roorkee*

OPERATING SYSTEM   *June 2017*

- Created a microkernel written for x86 system in C and Assembly (AT&T Syntax).
- Added a basic VGA driver, keyboard driver and PIT.

Aasha https://github.com/ketanhwr/aasha-backend   *IIT Roorkee*

COURSE PROJECT, PROF. SANDEEP K. GARG, MICROSOFT CODE.FUN.DO SUBMISSION   *Feb. 2017 - April 2017*

- Created a mobile app for providing medical assistance and access to visiting doctors for patients in rural areas.
- Designed backend API as well as front end for desktop users of Aasha.
- Selected for campus onsite event on Microsoft Code.Fun.Do
- Worked in PHP using Laravel Framework. Used Bootstrap for frontend.

Backdoor https://backdoor.sdslabs.co   *IIT Roorkee*

SDSLABS   *Oct. 2016*

- Created an admin panel for easily managing competitions and uploading/modifying challenges.
- Worked in vanilla PHP and jQuery.

Extracurricular Activity

SDSLabs
IIT Roorkee

DEVELOPER
Jan. 2016 - PRESENT

- Involved in developing applications for campus students as well as open to Internet.
- Added admin panel in Backdoor to manage competitions, challenges and notifications. Worked primarily in PHP and jQuery.
- Added volume support for Play. Based on Express Framework(Node.js).
- Added option to see friends standings in Erdos. Worked primarily in PHP.

Programming and Algorithms Group
IIT Roorkee

MEMBER
Oct. 2015 - PRESENT

- Involved in organising lectures and competitions based on competitive programming for campus students as well as for people outside college.
- Qualified for ICPC Regionals in 2015 as well as 2016. Also selected for ICPC India Finals 2016.
- Participated in Indian Programming Community Camp organised by CodeChef in Mumbai.

Watch Out! News Agency
IIT Roorkee

WEB DESIGN HEAD
Sep. 2015 - PRESENT

- Involved in maintaining the website for official campus magazine. Worked in Jekyll, Bootstrap and SASS.

Student Mentorship Program
IIT Roorkee

MENTOR
Oct. 2016 - PRESENT

- Involved in mentoring, guiding and helping the freshmen of IIT Roorkee.

Progred - Programming Redefined
DPS Ranipur

CO-FOUNDER
Aug. 2014 - March 2015

- Started a computer club in my high school for students interested in programming and other technical activities.
- Organised lectures on Game Development, Robotics and Android Development.
- Conducted workshop and contests on competitive programming to promote IOI among school students.
- Made a simple judge to conduct programming contests: CodeRed

Skills

Programming	*Proficient:* C/C++, PHP, Node.js; *Experienced:* Python, Java, C#
Web	Laravel with PHP, Express.js with Node.js, React-Redux
Game Development	Unity3D, Unreal Engine, HTML5/JS, C/C++, OpenGL
Utilities	Git, Sublime Text, Linux shell utilities, GDB, LaTeX, Vim

Coursework

A	Design and Analysis of Algorithms	A	Operating Systems
A	Data Structures and Algorithms		Discrete Structures
	Computer Architecture		Object Oriented Analysis and Design
	Theory of Computation	A	Database Management Systems
	Computer Networks		Network Programming
i	Principles of Programming Languages	*i*	Compiler Design

A: grade   *i: In progress*

Miscellaneous

- Frequent blogger. Maintains a tech blog at ketangupta.in/blog
- Music Enthusiast. Completed a 5 year course in Classical Vocal Music. Also play Violin and Ukulele.
- Speedcuber. Can solve 2x2x2, 3x3x3, 4x4x4, 5x5x5, Megaminx and Square-1. Can also solve 3x3x3 One-Handed and Blindfolded.
- District Level Badminton and Table Tennis player. Was part of NSO Table Tennis Team in freshman year.