

Rohit ASHIWAL

Computer Science Junior

[in](#) rohit-ashiwal [r1walz](#) [+91 7340 605885](#) [@ rashiwal@cs.iitr.ac.in](#)
[DF 09, Jawahar Bhawan, IIT Roorkee, Uttrakhand - 247667](#)

Someone who is intrigued by computers, System Software hobbyist with interest in field of distributed programming and core disciplines of Computer Science

EDUCATION

2017-Present Computer Science and Engineering, Indian Institute of Technology Roorkee
2007-2017 St. Anselm's North City, Jaipur

SKILLS

Programming	Python, Java, Kotlin, Go, JavaScript
System Programming	C/C++, Rust
Web Technology	React.js, HTML5, CSS3, Bootstrap
Utilities	Git, Shell Scripting, Vim, SQL, \LaTeX

OPEN SOURCE

GIT FOR WINDOWS

FEB' 19 - PRESENT

 [git-for-windows/git](#)

MinGit in Windows comes without gzip bundled inside. git-archive uses "gzip -cn" to compress the commit tree but for this to work gzip needs to be present on the host system. My work was to add minimal code to eliminate the need for this gzip dependency.

[C](#)

GIT

FEB' 19 - PRESENT

 [git/git](#)

There are two backends available for rebasing, viz, the am and the interactive. Naturally, there shall be some features that are implemented in one but not in the other. The project aimed to remove inconsistencies in how the command line options are handled.

[C](#) [Shell](#)

PROJECTS

APPI

JAN' 19 - PRESENT

 [The backend of Appetizer](#)

A campus app that helps in reducing food wastage within the campus. My work was improve the UI of the "menu", the interface through which wardens and mess secretaries add mess week menu, adding Django models for toggling tasks in android app and processing csv and xls file for attendance marking.

[Django](#) [JavaScript](#) [jQuery](#)

RUSTY-SNAKE

DEC' 18 - JAN' 19

 [r1walz/rusty-snake](#)

It is a simple snake game developed by using Rust and piston_window.

[Rust](#)

GO-PLAY

AUG' 18 - PRESENT

 [r1walz/go-play](#)

A web app that handles request over local-network and plays music. The backend of this app was written in Go and frontend in React.

[Go](#) [React](#)

TRIANGLIFY

JAN' 18 - PRESENT

 [mdg-iitr/trianglify](#)

Highly customizable library to generate beautiful triangle art views for android, I improved the saving feature in App and [WIP] make a live wallpaper app out of this lib.

[Java](#) [Android](#) [Algorithm](#)

OBJECT ORIENTED PROGRAMMING

AUG' 17 - NOV' 17

In depth course on fundamentals of Object Oriented Programming with an introduction to languages such as Java and C++.

OOB Java C++

OPTIMIZATION TECHNIQUES

AUG' 17 - NOV' 17

Fundamentals of optimization techniques used in Computer Science along with basics of Game Theory.

Linear Algebra Game Theory Scheduling

DATA STRUCTURES

JAN' 18 - MAY' 18

An introduction to fundamentals data structures used in programming along with basics of Number Theory.

Data Structures Algorithm Number Theory

COMPUTER ARCHITECTURE AND MICROPROCESSORS

JAN' 18 - NOV' 18

A course to familiarize students with the architecture of a processor and machine level programming with a glimpse of assembly language **MIPS**

Architecture Assembly 8085 8086

OPERATING SYSTEMS

JAN' 19 - MAY' 19

A course about Operating Systems, deals with topics such as Memory and Resource Management, Process and Resource Scheduling, Device Management. We also worked on implementing a new kind of scheduler policy for the Linux kernel.

C Linux Kernel

SYSTEM SOFTWARE

JAN' 19 - MAY' 19

Very involving course on the study of design and functioning of a system program. The course revolved around an hypothetical machine, "SIC". We also developed several system softwares for this machine including, but not limited to, an assembler.

SIC SIC/XE Assembler

 WORK

<p>May' 19 Present</p>	<p>Student Software Developer, GIT, Google Summer of Code Google Summer of Code is a global program focused on bringing more student developers into open source software development.</p> <ul style="list-style-type: none"> > Worked with Git to improve consistency of sequencer commands > Added requested features to git-for-windows
<p>May' 18 Present</p>	<p>Hacker, INFOSEC, IIT Roorkee InfoSec is a group of students that spread awareness about information security.</p> <ul style="list-style-type: none"> > Spread awareness about Information and Cyber Security > Conduct CTFs, viz, backdoorCTF, n00bCTF
<p>Jan' 18 Jan' 19</p>	<p>Developer, MOBILE DEVELOPMENT GROUP, IIT Roorkee MDG is a small group of students that foster android development in the campus premise.</p> <ul style="list-style-type: none"> > Spread knowledge about android and related technologies > Conduct open lectures for campus students
<p>Jan' 18 Mar' 18</p>	<p>Android Developer, COGNIZANCE, IIT Roorkee Cognizance is the official technical festival of IIT Roorkee.</p> <ul style="list-style-type: none"> > Improved UI and UX of the Android app. > Worked on REST APIs
<p>May' 17 Jul' 18</p>	<p>Cadet, NATIONAL CADET CORPS, IIT Roorkee The NCC is an Indian military cadet corps with its Headquarters at New Delhi, Delhi</p> <ul style="list-style-type: none"> > Participated in the Guard of Honor Parade > Conducted Blood Donation Camps, Tree Plantation Drive, etc

+ POSITION OF RESPONSIBILITY

Dec' 18 | **Mentor, WINTER OF CODE, MDG**

Jan' 19 | WoC is an event, just like GSoC, conducted jointly by MDG and SDSLabs.

- > Mentored a bunch of students to make android application during their winter holidays
- > Interviewed selected students

Dec' 18 | **Organizer, DROID WARS, MDG**

Jan' 19 | Droid Wars is an event conducted by MDG where students make android applications based on predeclared theme.

- > Mentored some students
- > Conducted interview of selected students