

# Utkarsh Maheshwari

Aspiring Software Engineer. Ardent Open Source Supporter.  
[utkarshme.github.io](https://github.com/utkarshme) | [utkarshmeg6@gmail.com](mailto:utkarshmeg6@gmail.com)

## EDUCATION

### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI

B.E. IN COMPUTER SCIENCE  
 CGPA: 6.7 / 10.0  
 2019 | Goa, India

### URSULINE CONVENT SCHOOL

Percentage: 91%  
 2015 | Greater Noida, NCR, India

## LINKS

Github:// [utkarshme](https://github.com/utkarshme)  
 Twitter:// [utkarshme96](https://twitter.com/utkarshme96)  
 LinkedIn:// [utkarshme96](https://www.linkedin.com/in/utkarshme96)

## SKILLS

### LANGUAGES

Proficient:  
 C • NodeJS • Shell  
 Working knowledge:  
 C++ • Java • Python • Lua •  
 Scala • Assembly • Web Tech •  
 PHP • SQL • MongoDB • LaTeX

### TOOLS

Vim • Linux • Git • Docker •  
 Make/Cmake • TravisCI

## EXTRA CURRICULAR

### OPEN SOURCE CONTRIBUTIONS

Neovim • Elementary Tweaks • Gnome  
 Todo • BaremetalOS

### HOBBIES

Literature • Philosophy • Music  
 Production • Graphics Design

### SOCIETIES AND DEPARTMENTS

Open Source Development Labs •  
 Department of Creative Works •  
 Department of Publicity and PR

## RECOMMENDATIONS

### SUBHASIS BHATTACHARYA

Director - Software Engineering  
 PBSWorks, Altair Engineering

## EXPERIENCE

### PBSWORKS, ALTAIR ENGINEERING | SOFTWARE ENGG. INTERN

Jul 2018 - Dec 2018 | Bangalore, India

- Led and completed the project for adding support in Apache Spark to use PBSPro as a cluster workload manager.
- This allows running Big Data and HPC jobs on single cluster.

### NEOVIM | GOOGLE SUMMER OF CODE STUDENT

May 2018 - Apr 2018 | Remote

- Improved external UI protocol to allow applications to provide "vim-mode".
- Work done during the whole period: [github.com/neovim/neovim/issues/8320](https://github.com/neovim/neovim/issues/8320)

### AIIMS BHOPAL | SOFTWARE ENGG. INTERN

Jun 2018 - Jul 2018 | Bhopal, India

- Wrote the backend for a webapp for medical reports and inventory management.
- Automated documentation, testing: [github.com/BitsAiims2017/api](https://github.com/BitsAiims2017/api)

## PROJECTS

### JAZZ | OS DEVELOPMENT

[github.com/utkarshme/Jazz](https://github.com/utkarshme/Jazz)

Jazz is a hobby OS in its early stages written from scratch as a proof of concept to understand OS by doing.

### UDT PROTOCOL IMPLEMENTATION | NETWORK PROGRAMMING

[github.com/UtkarshMe/udt-c](https://github.com/UtkarshMe/udt-c)

An implementation of the UDP-based Data Transfer (UDT) protocol in C. UDT is a much faster data transfer protocol than TCP with a socket interface just like TCP.

### SYNERGY | NETWORK PROGRAMMING

[github.com/UtkarshMe/Synergy-linux](https://github.com/UtkarshMe/Synergy-linux)

An application to sync Android and Linux notifications when connected to the same local network, written in C and allows extension through plugins.

### A VIM STORY | LOW GRAPHICS GAME DEVELOPMENT

[github.com/UtkarshMe/a-vim-story](https://github.com/UtkarshMe/a-vim-story)

A ncurses based 2D (bomberman-like) game to learn Vi/Vim, written purely in C language with LibNcurses, CMake, Doxygen.

### WRITE. RUN. TWEAK. | GAME DEVELOPMENT

[github.com/UtkarshMe/WRT](https://github.com/UtkarshMe/WRT)

A game submission for GitHubGameOff 2019 game jam written in Lua and LOVE2d.

### MICRO-C COMPILER FRONTEND TO LLVM | COMPILER

[github.com/UtkarshMe/uc-to-llvm](https://github.com/UtkarshMe/uc-to-llvm)

Parser for micro-C (a subset of C language) which generates LLVM IR.

### DOCKER PRIVATE NETWORK | DOCKER

[github.com/UtkarshMe/docker\\_private\\_network](https://github.com/UtkarshMe/docker_private_network)

Proof of concept network private to docker containers connected to docker swarm.

### BITSNET LOGIN | SHELL SCRIPTING

[github.com/UtkarshMe/BitsnetLogin](https://github.com/UtkarshMe/BitsnetLogin)

A command-line application for automating logging into campus internet portal.