

# Utkarsh Maheshwari

Software Engineer. Ardent Open Source Supporter.  
coditva.dev | coditva@gmail.com

## EDUCATION

### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI

B.E. IN COMPUTER SCIENCE  
2019 | Goa, India

### URSULINE CONVENT SCHOOL

2015 | Greater Noida, NCR, India

## LINKS

Github:// [coditva](#)  
Twitter:// [coditva](#)  
LinkedIn:// [coditva](#)

## 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.
- [github.com/pbspro/spark-pbspro-connector](#)

### NEOVIM | GOOGLE SUMMER OF CODE STUDENT

May 2018 - Aug 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](#)

### 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](#)

## PROJECTS

### JAZZ | OS DEVELOPMENT

[github.com/coditva/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/coditva/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/coditva/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/coditva/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/coditva/WRT](#)

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

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

[github.com/coditva/uc-to-llvm](#)

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

### DOCKER PRIVATE NETWORK | DOCKER

[github.com/coditva/docker\\_private\\_network](#)

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

### BITSNET LOGIN | SHELL SCRIPTING

[github.com/coditva/BitsnetLogin](#)

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