# Utkarsh Maheshwari

# Aspiring Software Engineer. Ardent Open Source Supporter.

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# **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://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

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#### **TOOLS**

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

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

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

aithub.com/coditva/WRT

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

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

aithub.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.