

# Dhruv Chawla

Vellore, Tamil Nadu, India



dhruv263.dc@gmail.com



[linkedin.com/in/0xdc03](https://www.linkedin.com/in/0xdc03)

## Summary

A capable programmer learning compiler design. Experienced with interpreters, and familiar with systems and assembly programming. Skilled with the C++ programming language.

## Experience



### Core Committee Member

VIT Linux User Group

Jan 2023 - Present (10 months)



### Core Committee Member

ACM-VIT CHAPTER

Mar 2022 - Present (1 year 8 months)



### Google Summer Of Code Contributor (The LLVM Compiler Infrastructure)

Google Summer of Code

May 2023 - Sep 2023 (5 months)

- Implemented the InferAlignment pass into the LLVM optimization pipeline
- Added a new diagnostic to clang
- Implemented transforms within InstCombine
- Found a major performance improvement in SetVector
- Found miscellaneous performance improvements in DAGCombiner and InstCombine

<https://summerofcode.withgoogle.com/programs/2023/projects/JdqGUwNq>



### Vice Chair

VIT Linux User Group

Jan 2022 - Jan 2023 (1 year 1 month)

- Helped set up and coordinate the recruitment forum for the freshers' recruitment process
- Conducted interviews of new recruits
- Conducted the "Quality Control in Open Source Projects" event for VIT Vellore's Quality Week



### Google Summer Of Code Contributor (The ENIGMA Team)

Google Summer of Code

Jun 2022 - Sep 2022 (4 months)

- Worked on rewriting most of the frontend of the ENIGMA Development Language compiler, a scripting language based on GML with some features from C++

- Rewrote most of the Binary Buffer system which deals with storing and reading data from byte streams
- Made a serialization and deserialization system which uses template metaprogramming for static polymorphism

<https://summerofcode.withgoogle.com/programs/2022/projects/BrXiUNA2>



## **Core Committee Member**

VIT Linux User Group

Dec 2020 - Jan 2022 (1 year 2 months)

- Initiated discussions with the rest of the club
- Conducted the event "GIT IT RIGHT" , an introduction to the git version control system
- Worked on Arcadia Linux, an in-house Linux distribution

## **Education**



### **Vellore Institute of Technology**

Bachelor's degree, Information Technology

2020 - 2024



### **Navy Children School**

AISSCE

2018 - 2020



### **Navy Children School**

Intermediate

2014 - 2018



### **Navy Children School**

Middle School

2008 - 2014

## **Licenses & Certifications**



### **Design and Analysis of Algorithms - NPTEL**

NPTEL21CS68S4332059403122958



### **Compiler Design - NPTEL**

NPTEL22CS14S2446142802071248



### **Introduction to Haskell Programming - NPTEL**

## **Skills**

Git • LLVM • Python (Programming Language) • C++ • C (Programming Language) • IntelliJ IDEA • Operating Systems • Linux • Rust (Programming Language) • Microsoft Visual Studio Code