

# ADVIK KABRA

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Advik Kabra

github.com/advikkabra

## EXPERIENCE

### Upcoming Google STEP Intern

#### Google

May 2025 - July 2025

Bangalore, KA

### SEE IIT, Trading Track Participant

#### Jane Street

Dec 2024

Hong Kong

- One of 4 participants selected from IIT Madras (approx. 30 selected from top IITs).
- Learnt Jane Street's quantitative approach to trading through short lectures, mock trading games, and trading research workshops by employees at Jane Street.

### Open Source Compiler Developer

#### LFortran

Aug 2024 - Dec 2024

Remote

- Worked as a contractor for LFortran, an LLVM-based Fortran compiler.
- Improved stack tracing capabilities, and worked on updating the compiler to LLVM 17.
- Worked on compiling third party Fortran codebases with LFortran

### Google Summer of Code

#### Python Software Foundation

May 2024 - Aug 2024

Remote

- Worked on compound data structures in LPython, an LLVM based Python compiler, focusing on dictionaries and sets.
- Improved and added support for searching, iterating, and accessing these structures, making LPython up to 10x faster than C++.
- Improved performance and reduced memory leaks, and benchmarked using sophisticated graph benchmarks.

## PROJECTS

### Open Source Contributions

- Contributor to the Hazel Engine, an open source game engine, LPython, an ahead of time Python compiler, Wagtail, a Django based CMS, and LFortran.
- Technologies used: C++, OpenGL, ImGui, GLFW, LLVM, Python, Django, React

#### Shunya

[Demo](#) [Repo](#)

- Created a carbon footprint tracking Chrome extension in < 24 hours, tracking flights and purchases
- Technologies used: React, Next.js, Javascript, Python, Flask, Firebase, Chakra UI, HTML, CSS

#### EasySign

[Demo](#) [Repo](#) [Devpost](#)

- Created an AI coach for learning Indian Sign Language which recognizes signs on video.
- Technologies used: React, Next.js, Mediapipe, Firebase, Chakra UI, Vercel, Javascript, HTML, CSS

## EDUCATION

### Indian Institute of Technology Madras

#### B. Tech, Computer Science and Engineering

2023 - 2027

Chennai, TN

CGPA: 9.93/10.0

### National Public School

#### CBSE AISSCE - 12th Board

2023

Bangalore, KA

97.6%, Valedictorian

### National Public School

#### CBSE AISSE - 10th Board

2021

Bangalore, KA

98.6%

## ACHIEVEMENTS

JEE Advanced | All India Rank 123

JEE Main | All India Rank 359

KVPY Fellowship, IISc | All India Rank 360

NTSE Scholarship, NCERT

MVHacks | [Winner](#)

PowerToFly Hackathon | [Winner](#)

Codeforces Specialist | [advikkabra25](#)

## EXTRACURRICULARS

### Quiz Club, Coordinator

- Member of the Quiz Contingent, and finalist in Inter-IIT 2024 and Nihilanth (Inter IIT-IIM 2024)
- Winner in inter-college quizzes held in IIT Madras, NALSAR and REC Chennai.

### Programming Club, Coordinator

- Conducted an offline workshop on software development in NIT Trichy and online workshops in CFI Summer School
- Developed software including a **database system** [🔗](#), and a **statement reducer and arithmetic parser system** [🔗](#).

### Saarang Sponsorship & PR, Creative

- Managed social media for Saarang, South India's largest fest.
- Responsible for bringing in sponsors and managing their requirements.

### Avanti Fellows, Mentor

- Mentored two underprivileged students for JEE.
- Visited JNV, Pondicherry for in-person teaching sessions for topics in JEE.