# Harishankar Kumar

https://www.linkedin.com/in/hsk4link/

### **EDUCATION**

• Thapar Institute of & Engineering Technology Bachelor of Technology - BTech; 8.6 CGPA Patiala, Punjab 2020 - 2024

• Kendriya Vidyalaya No 2 XII, PCM; 95% Boards

Ferozepur Cantt, Punjab 2007 – 2020

Email: hari01584@gmail.com

Mobile: +918872276957

### OPEN SOURCE AND VOLUNTEERING

#### • Google Summer of Code

Remote, Remote

May 2023 - Sept 2023

Contributed to ScummVM under GSoC'23 - Project link

- Audio Mixers and Graphics: Added support for new audio formats and improved frame rendering algorithms including optimizations and pixel-by-pixel drawing.
- o Virtual Machine and Simulation: Improved support for new games while fixing various bugs in simulator.
- Compiler Optimization: Fixing bugs in compilers and adding edge cases in code, Compiling Lingo to C++ using Yacc Parser.
- BuildBot (CI/CD): Fixed deployment warnings, memory leaks and added support for screenshot matching between subsequent builds.
- **Debugging**: Using tools like GDB, and ASAN to debug and fix memory leak, segmentation faults and debugging any bugs in code.

#### Projects

- MeraAadhar: An application where user can book operators for doorstep Aadhar updation. Winner of Smart India Hackathon 2022 (Team SHARK), awarded 1 lakh rupees. (Flutter, Django, Flask, FastAPI) Link (Linkedin Post)
- FaceAI: A face recognition system that compares an image against single/multiple images. (Python, OpenCV, InsightFace, ArcFace) Link (GitHub)
- Contexto: Conducted NLP project analyzing millions of tweets on a specific topic, providing valuable insights for policymakers, market analysis, and trend identification. Published a research paper on the same! (Python, Pandas/Dask, Numpy)
- BubbleBoxModel: A set of jupyter notebooks that allows to identify speech bubbles in manga panels, It can segment image and support language translation as well. (Tensorflow, Keras, Pytorch) Link (GitHub)

## Honors and Achievements

- HackTU 2023 Winner: Collaboration of Societies, Awarded 20k rupees for developing Finfy financial training app
- SIH' 2022 Winner: Government hosted biggest student hackathon promoting problem-solving through technology
- Maketahon 3077 (2021) Winner: Hosted by Microsoft Learn Student Chapter (MLSC) Society
- Hacklipse 2021 Winner: Created Pustika, book reselling platform that is my first university hackathon experience

## Miscellaneous

- Content Analysis of Twitter conversations associated with Turkey-Syria Earthquakes
  Research paper published under ICDAM 2023 Conference, analysing turkey-syria earthquakes by tweets
- Data Structures and Algorithm

Solved more than 400+ questions on various platforms, profiles: leetcode, geeksforgeeks, codingninjas