# 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

Ferozepur Cantt, Punjab

Email: hari01584@gmail.com

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2007 - 2020

XII, PCM; 95% Boards

# OPEN SOURCE AND VOLUNTEERING

## • Google Summer of Code

Remote, Remote

Contributed to ScummVM under GSoC'23 - Project link

May 2023 - Sept 2023

- Audio Mixers and Graphics: Added support for new audio formats and improved frame rendering algorithms including optimizations and pixel-by-pixel drawing.
- 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.
- o Network Project Mentor: Spearheading network project while Link to drive resources here.

Societies

Patiala, Punjab

Mentor at Google Developer Student Clubs

Sept 2021 - Present

- Quantum Computing Workshop: Conducted workshop on quantum computing for Qiskit Fall Fest 2022 with 100+ participants. Session recording.
- Quantum Computing Project: Contributed as proofreader and editor for Quantum Computing study materials, involving multiple concepts. GitHub repository.

Member at Microsoft Learn Student Chapter

Jul 2021 - Jun 2022

• Event Speaker: Conducted workshop attended by 100+ students on game development by using graphic library SDL2 and C++, Link to photos here.

# EXPERIENCE

# • Hobbyist Developer (Android)

Remote

Indie

Lifetime

- Xenone for Blockman Go: Developed a highly successful utility tool for the game Blockman Go, with 250k+ installations and revenues exceeding 80,000 Rs (\$1,000). View on Play Store
- Vortex Connect Online Multiplayer Solution: Developed lobby-based solution for Minecraft servers. 16k installs with 1k+ active users and testers. Created using Android Native (Java). View on Play Store

• Content Writing

Remote

Blogging/Posts

Lifetime

o Content Writing: Writes technical and non technical blogs, including tutorials, real life experiences, step-by-step walkthrough, demo/proof of concept work etc! Blog Link

#### GAMES

- DevNakes: Developed a 2D classic snake game during the DevLauncher's Game-A-thon using C++, SDL2, and Emscripten.
- Shapes 2D: Created a casual mobile game where players catch green shapes while avoiding red and yellow ones. Published on the Google Play Store.
- BlackWorld: Designed and developed a 3D parkour game using Unity as part of an academic elective in gaming and animation.
- RaspMyBerry: Raspberry Pi Moderator and status tool using discord client.

# 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, FastAPI) Link (Linkedin Post)
- 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)
- WaterInator: IoT to upload water purity parameters to blockchain for automatic inspection, web dashboard for analysis. Unesco-India-Africa Hackathon Finalist, offline hack with 22 African countries. (Solidity, NodeJS Backend)
- 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, LDA, BERT)
- FaceAI: A face recognition system that compares an image against single/multiple images. (Python, OpenCV, InsightFace, ArcFace) Link (GitHub)
- Pustika: A book reselling platform for getting cheap second handed books, included buying and selling and a portal to advertise current stock. (Flask, SQLAlchemy) Link (GitHub)
- LogSecure+: Automated compliance breach detection system using large language models for multi-source log analysis. Aims to ensure organizational adherence to constantly evolving compliance and regulatory policies. (Python, LangChain, LLMs)
- RaspMyBerry: Raspberry Pi Moderator and status tool using discord client.

### 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