

Avinal Kumar

Student, Programmer, Technical Writer, Open Source Developer

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EXPERIENCE

Script Winter of Code | Participant Rotten-Scripts

Dec 2020-Present

- Proposed new sections for PowerShell Scripts
- Proposed and created structure of website for the project
- Added Automatic Pull Request Assigning Action

Google Season of Docs 2020 | Technical Writer, VideoLAN

Sep 2020-Nov 2020

- Created [VLC for Android User Documentation](#)
- Proposed a new structure for the documentation (Sphinx, reStructuredText)
- Writing user-friendly and well researched content for technical and non-technical users.
- Proper amount and placement of screenshots and other media for appealing and informative docs.
- Optimized web pages for major form factors and ease of navigation

PROJECTS

Automated Coding Activity GitHub Action | Python, Docker, GitHub Actions, Bash Scripting

- Automatically generates WakaTime Coding Activity graph that can be embedded in Readme(s) and websites.
- Uses WakaTime API to gather coding activity of last seven days as JSON.
- The data is then processes and converted to a SVG graph using matplotlib

Binary Search Tree Traversal Animator | Java, Gradle, Swing, Multi-threading

- Creates Binary Search Tree node-by-node and draws the path taken by the traversals.
- Visualizes Inorder, Preorder, Postorder and Levelorder using multi-threading and recursion.

Astronomical Image Extraction from FITS File | C++, CFITSIO, Boost.GIL, CMake

Flexible Image Transport System has been used for decades to store and transfer astronomical images and needs specialized software to view them, this project extract those images as JPEG or PNG that can be viewed by common image viewer.

Open Source Contributions | [GitHub](#), [GitLab](#)

Contributed to organizations: GitHub, Jupyter-XEUS, JetBrains, Embox, VideoLAN

SKILLS

Programming

- Data Structures and Algorithms
- C/C++ (2+ years) - STL, Pointers, Templates, OOP, API development, Boost C++, Qt(basic)
- Java (1+ years) - Collections, Generic Programming, Basic Multi-threading
- Basic - SQL, MATLAB, HTML, CSS, JavaScript, Python

Tools/Others

- Scripting(Bash, Python), git, GitHub Actions, CI/CD, Linux/Unix, Windows, Windows Subsystem for Linux
- \LaTeX , Visual Studio Code, CLion, IntelliJ IDEA, Vim, Visual Studio, Word, PowerPoint, Excel

EDUCATION

National Institute of Technology, Hamirpur | B.Tech in Computer Sci. and Eng.

2018-Present

CGPA till 5th semester - 8.39

Courses - Advanced Calculus, Statistics, Probability and Queuing Theory, Algorithm Design, Digital Logic Design, Database Management Systems, Data Structures, Operating Systems, Compiler Design, Computer Networks

The Coding School | Quantum Computing

Oct 2020-Present

Grade 1st semester - 99.32%

Basic Quantum Mechanics and Quantum Computing

CERTIFICATIONS

Google IT Support Professional | Coursera

2020

Computer Network, System Administration, Operating System, Cyber Security

OTHERS

Computer Science Engineers' Society | Coordinator

2019-Present

Departmental Society of CSE NITH. Organizes Monthly Competitive Programming Contest and Bootcamp.