

Rish Bhardwaj

As of: Apr 2025

Android, automotive, software for tangible systems, cameras, imaging

Portfolio: [rish.space](#) LinkedIn: [linkedin.com/in/bhardwajrish](#) Languages: English, German

EXPERIENCE

Software Engineer at Google (Germany, Since Nov 2019)

- Led a team of 3 engineers to develop & productionize Connectivity for [Android Auto Receiver](#) on [Android Automotive OS](#).
- My key contributions were in defining and productionizing Android Auto's car-to-phone setup & communication protocol over Bluetooth, Wifi Access Point, and USB.
- Integrated and launched with 9 Car OEMs. Collaborated extensively with multiple cross time zone teams across domains - Android Auto on the phone, Android Wifi, and Android Bluetooth teams.

Camera Systems Engineer (Android) at Tonbo Imaging (India & Lithuania, Dec 2016 - Nov 2019)

- A defence thermal camera company where I built software for camera systems based on Android.
- Led 4 engineers to develop robust camera software architecture for 100% software reusability across all camera product lines; security cameras, weapon sights, drone/robotics cameras.
- Created a graphics library + camera pipeline library in Java and C for OpenCV-CL-GLES for real time computer vision and image processing on Android.
- Performed real time video stabilization using an IMU and fast GPU operations.
- Integrated deep learning based detection and classification models on thermal images - including face detection, people counting, animal detection.
- Developed real time implementations of thermal pipeline AGCs - DPHE, CLAHE in Python and OpenCL.
- Developed RTSP and RTP live streaming using Gstreamer. Certified the camera software with ONVIF.

Research Intern at Tesseract Imaging (India, May 2015 - Oct 2015)

- An MIT Media Lab spinoff where I built a real time 360° degree image viewer on Android streaming from an embedded linux camera.
- Created 360° walkthroughs using 3D markers and automated floor plan generation based on marker placement.

PROJECTS

- [Social Media blocker](#): Built and designed an Android blocker to limit social media usage.
- [Lifehacks 1M+ installs](#): Created an infinite scrolling app with 1 Million+ installs during university. I later sold the app.
- [Lens Launcher 3M+ installs](#): Contributed significantly to an open source Android launcher.
- [Personal Portfolio Template](#): **172 stars** on GitHub, and countless emails of people using my portfolio template
- [Blogging](#): I've been writing since 2015, about work, life, love, and my projects. Come see what I have to say!

EDUCATION

B.Tech in Information & Communication Technology at DA-IICT, India (July 2013 - April 2017)

[Co-authored](#) a paper on Social Ties based on Spatio Temporal data (2016)

Top 0.5 percentile out of 1 million+ candidates in India's Engineering Entrance Exam (JEE) (April 2013)

KEY WORDS

Kotlin, Java, Python, C++ Android, Android at Google, AOSP, AAOS, Automotive, Infotainment, device-to-device, Linux, Git, Camera, Imaging, Thermal Imaging, Image processing, OpenGL, linear algebra, 3D geometry, Rapid prototyping for hobby robotics, Training RNNs & CNNs for detection and recognition,