

## EDUCATION

Chandigarh College Of Engineering and Technology, Panjab University | India  
Bachelor of Engineering in Electronics and Communication

| 2016 – 2020

- **Grade:** 8.80 CGPA with Honors, **Rank:** 2/62
- **Scholarship:** Received full tuition fee waiver 3 times for the first 3 years of bachelor's degree based upon merit.

## PROFESSIONAL EXPERIENCE

Quark Software Inc. | India

Software Engineer 1, R&D

| Sep 2020 – Present

Software Engineer Intern, R&D

| Jan 2020 – Sep 2020

Working on adding new features and enhancing stability of Quark's flagship product (QuarkXPress) in the domain of graphics and image processing.

### Key Responsibilities:

- Work closely with scrum master in understanding the given assignments in the context of overall scope and to implement them in a timely manner with high quality.
- To develop and understand algorithms, especially graphics and image processing algorithms.
- To write efficient code in C++ and objective-C which can be easily understood by other developers.
- Maintenance and debugging of code base.
- Review code written by peers.
- To handle the process of localization.

### Achievements:

- Received above and beyond award for development of Stock Image feature and localization of QuarkXpress.
- Oversaw 2 interns and provided them with necessary guidance.
- Successfully implemented Layout Level Bleed Lines feature in QuarkXpress, which was helpful for more than 18000 users.

## SKILLS

- **Languages:** C++, Objective-C, C, Python, Java, MATLAB.
- **Technologies:** Cocoa on Mac, Win32 API, GDI, GDI+, OpenCV.
- **Web Technologies:** HTML, CSS, JavaScript, TypeScript, Angular, SQL, NoSQL.
- **Version Control Systems:** TFVC, Git.
- **Tools:** XCode, Visual Studio, Eclipse.

## PROJECTS

1. **Embedded Image Feature, QuarkXpress, Quark Software Inc.** | June 2021 – Dec 2021
  - Developed the functionality that enables the user to embed high resolution images (e.g. tif files upto 500 MB) within the document.
  - Modified internal representation, which was earlier used to import low-res images of different formats, to work with high-res images.

- I also worked on giving end user the ability to apply various image effects, for instance, Gaussian Blur and edge detection, on those images.
- 2. Stock Image Feature, QuarkXpress, Quark Software Inc.** | Jan 2021 – June 2021
    - Made palette on windows which allows users to search images from various 3<sup>rd</sup> party image providers, such as pexels and unsplash, and simply drag and drop those images on the document.
    - Used Angular to make the user interface and used Microsoft WebView2 as the rendering engine to display the user interface on our Win32 based application.
    - Used curl to interact with RESTful APIs of image providers.
    - This was useful for more than 15000 users.
  - 3. Layout Bleed Lines, QuarkXpress, Quark Software Inc.** | March 2021 – June 2021
    - This feature was to resolve the issue of aesthetics on bordering of a document while printing.
    - Made UI and developed backend functionality to resolve this issue.
    - This was useful for more than 18000 users.
  - 4. Self-Driving Car, CCET, Panjab University** | July 2020 – Dec 2020
    - Working model of a car that used sensors and a camera to interact with the environment. It was based on raspberry pi and used Open CV in C++ for image processing.

## EXTRA-CURRICULAR ACTIVITIES

- Represented my college in national level debating competitions, being member of the debating society of my college.
- Organized various tree plantation and cleanliness drives.