

KAAIRA GUPTA

Dual-Degree :B.Tech (4 years) + M.Tech (1 year)
UG(II Year II Semester)
Contact No: 7310551236
Email: kaairagupta@gmail.com

Github: KaairaGupta LinkedIn: kaaira-gupta

Indian Institute of
Technology
Roorkee



Area of Interest

Opensource enthusiast (Linux kernel, Mozilla-mobile, Mozilla-PRESC) | Deep learning | Android Development

HACKATHONS: - Participated in WMN; a women only hackathon (link). - Won productathon, organised by E-Cell IITR (link)

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2019	B.Tech. 2nd Year	Indian Institute of Technology, Roorkee	8.375
2018	Twelfth	CBSE	90.8 %
2016	Tenth	CBSE	10.0

Internships

Piramal Housing and Finance | Finance

June 2019
(link)

- Investigated the effect of artificial intelligence on the loan-lending sector in India.
- Studied some lending cases like 'Haveli' and 'HEMA', and analyzed the possible impacts of AI on their lending flow.

Projects

Medical Image Segmentation | Deep Learning

Dec 2019- present

- Implementing a research paper 'Cell Image Segmentation using Generative Adversarial Networks, Transfer Learning, and Augmentations' published in CVPRW 2019 in Pytorch framework. It is currently put on training.
- The implementation trains 80K unannotated tiff images on a DC-GAN network and transfers the Discriminator's weights to the corresponding U-Net that uses the Discriminator and Generator as Encoder and Decoder respectively.
- This helps to train the U-Net with just 30-40 annotated images and get comparable results, thereby reducing manual labour.

Beat Saber 2.0 | Unity, IoT, VR (See Link)

Feb 2019- April 2019

- Built a VR game using Unity Game Engine with a controller-position-tracking system using Kinect.
- Showcased the game in Srishti 2019, the Annual Technical Exhibition of IIT Roorkee.

Traffic Assistance System | IoT (See Link)

Feb 2019

- Developed an IoT product using OpenCV, Android and Firebase cloud to solve the traffic congestion problems.
- It makes a pseudo-green way for emergency vehicles and consistently monitors the condition of roads.
- Presented the product in Productathon, organized by E-Cell IIT Roorkee, and bagged the first prize amongst teams from several institutes.

Geek Tree | Android (See link)

Dec 2018- Jan 2019

- Built an android application using Firebase and Kotlin, with the implementation of MVVM.
- The app connects IIT students of IIT Roorkee with similar interests, made as a part of the Winter of Code, organized by MDG, IIT Roorkee.

Convocation IIT Roorkee | Android and iOS app (See link)

Aug 2019- Sept 2019

- Developed a cross-platform app, using flutter for the convocation ceremony of IIT Roorkee.

Awards / Scholarships / Academic Achievements

- Encore Award 2019 awardee: Awarded to 8 sophomores out of 1000 at IIT Roorkee, by the batch of '89, for all-round excellence. (See credentials)
- National Talent Search Examination (NTSE) 2016 scholar: Both the stages cleared, receiving a yearly scholarship till completion of studies. (See credentials)
- National Standard Examination in Junior Science (NSEJS) 2016, organized by IAPT, IISc Bangalore cleared: Stood amongst the state-wise top 1%. (See credentials)
- Kishore Vigyanik Protsahan Pratiyogita (KVPY SX) scholar. (See credentials)
- Undergraduate Teaching Assistant for 2 successive semesters in 'Mechanics' and 'Probability & Statistics'. (See credentials)

Skills

Programming Java, Kotlin, C/C++, Python, Doxygen, Git, Jupyter
Additional Courses Taken Discrete Mathematics | Programming, Data Structures, and Algorithms Using Python | Deep learning 5-course specialization by Andrew Ng | Machine learning course by Andrew Ng.

Positions of Responsibility & Extra Curriculars

Mobile Development Group, IIT Roorkee

2018-present

- Android developer at MDG.
- Student mentor in Season of Code 2019.

Vision and Language group, ACM IIT Roorkee chapter

2020-present

- A core member of the group. Moderated many discussions and workshop sessions on Deep Learning.

Debating Society, IIT Roorkee

2018-2019

- Debator and participant at several inter-institute debates.