

Editorial Board:

Chief Editor :

Dr. M. Sheshikala

Staff Members:

Dr. P. Praveen

Mr. K. Ravi Chythanya

Mr. R. Ravi Kumar

Student Members:

K. Srinivas

TV Hari

Department of Computer Science and Engineering

VISION OF INSTITUTION

To be among the Top 20 Private Engineering Institutes in India by 2020

MISSION OF INSTITUTION

M1: Design and implement curriculum that equips students with professional and life skills.

M2: Recruit, develop and retain outstanding faculty to achieve academic excellence.

M3: Promote and undertake quality research in thrust areas of science and Technology.

M4: Collaborate with industry and academia to meet the changing needs of society.

Foster innovation and cultivate the spirit of entrepreneurship among students.

Vision of the CSE Department

Be a leader in promoting Computer Science and Engineering education.

Mission of the CSE Department:

M1: *Design and implement innovative courses to meet industrial needs.*

M2: *Provide innovative research solutions to address organizational and social needs*

M3: *Associate with knowledge hubs and professional bodies to share technological advancements.*

M4: *Establish network with organizations of national importance to inculcate the culture of entrepreneurship among students*

PEO's of the CSE Department:

PEOs (Program Educational Objectives) relate to the career and professional accomplishments of students after they graduate from the program. Consequently, assessment and evaluation of the objectives requires assessment tools that can be applied after graduation.

PEO1: *Ability to solve diverse and complex computer science and engineering problems across a broad range of domains.*

PEO2: *Pursue a career in the field of computer science and engineering.*

PEO3: *Pursue higher education and/or professional development courses for life-long learning*

PEO4: *Support community building activities to improve the quality of life.*

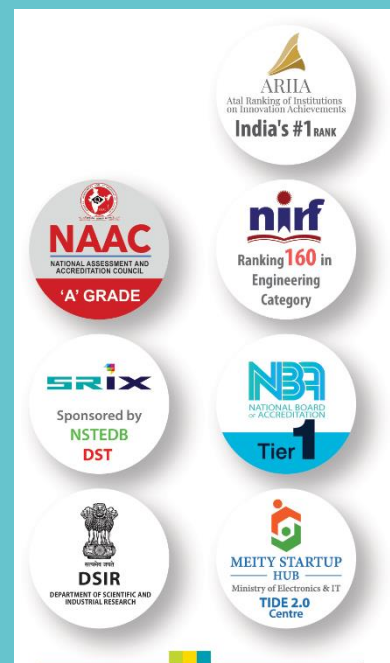
College Profile:

• College Achievements:

- ❖ All India 1st Rank among Private colleges in Atal Ranking of Institutions on Innovation Achievements - 2020 (ARIIA).
- ❖ NIRF-2020 Ranking: 160 in Engineering Category and
- ❖ Rank Band: 151-200 in Overall Category
- ❖ All the existing B. Tech Programs are accredited by National Board of Accreditation (NBA) in Tier-I category
- ❖ Technology Business Incubator (TBI) – SRiX, Sanctioned by NSTEDB, Department of Science and Technology
- ❖ Recognized as Scientific and Industrial Research Organization (SIRO) by Department of Scientific and Industrial Research (DSIR)
- ❖ National Assessment and Accreditation Council (NAAC) accreditation with 'A' Grade.
- ❖ Institutional Award for 'Very Good Transformations in Engineering Education' by Indo-Universal Collaboration for Engineering Education (IUCEE)
- ❖ Dewang Mehta National Education Leadership award based on Students Perception
- ❖ One of the 19 select nodal centers in India to conduct Smart India Hackathon (SIH) - 2019
- ❖ Great Performing College Award in IBM-The Great Mind Challenge (A National Level Talent Contest)
- ❖ Winner of Inter College Programming Contest – ASPIRATIONS 2020 conducted by Infosys.
- ❖ Education Leadership Award from 25th Business School Affaire and Dewang Mehta National Education Awards.

• National/International Collaborations:

- ❖ Indo-Universal Collaboration for Engineering Education (IUCEE) – Faculty Development
- ❖ Purdue University, USA – Engineering Projects in Community Service
- ❖ UMass, Lowell, USA – Entrepreneurship & Semester Abroad
- ❖ St.Louis University, USA – Entrepreneurship
- ❖ University of New Haven, USA – Semester Abroad
- ❖ University of Missouri, USA – Semester Abroad
- ❖ Cranfield University, UK – Technical Mentorship to Innovators & Start-ups
- ❖ Deakin University, Australia - Technical Mentorship to Innovators & Start-ups
- ❖ NETRA (National ESDM Technology Research Academy) - Product innovation hub by building entrepreneurial ecosystem in campus through industry partnership.
- ❖ Indian School of Business (ISB), Hyderabad – Technology Entrepreneurship Program
- ❖ Royal Academy of Engineering, UK & Bennett University, Noida - Deep Learning and AI Skills
- ❖ The Indus Entrepreneurs (TiE), Hyderabad - Entrepreneurship
- ❖ National Entrepreneurship Network (NEN) - Entrepreneurship



Profile of Department

- ❖ Getting involved in a career that enhances your skills and gives you good income is a blessing in disguise. And that's what engineering in Computer Science in Engineering is all about. When we talk about **best engineering college for placement** in Telangana, SREC is the name that first of all comes in mind. The reputable college has been producing gems for the society ever since its establishment. With hard core training in undergraduate and postgraduate computer science training programs, SREC is leaves no stone unturned for creating seasoned engineers.
- ❖ Since the past few years, importance of Computer Science Engineering has a stimulated manifold. The popular branch teaches you about software development, reasoning skills, and data analyzation and fundamentals of computer science. We provide a detailed structure about the course during 4-year undergraduate degree program. Our theoretical and practical sessions combined together help students to excel in studies and unbeatable job opportunities.
- ❖ Introduction to networking, testing, programming language and software development can make you an important part of IT industry. The first semester deals about general post work whereas the second semester gives an insight of computer science in form of different subjects.
- ❖ Students from SREC love to deal with different programming languages and decipher code. Computer Science as a career particularly needs analytical power in order to troubleshoot systems. We as a team work together work upon your creative skills so that you develop the required amount of innovation by the end of coursework. We help you to become eligible for maximum job opportunities in the town through our exceptional curriculum and training.
- ❖ SREC initiates industrial training and project work report so that students receive hands on experience apart from theoretical and practical knowledge. You need to have 10 + 2 degree in science stream for pursuing computer science engineering from SREC. We have been **the Best Engineering College for computer science** in the town because of seamless job opportunities and 100% placement records.

Industry Collaborations of the Department



The department runs a center of excellence in Artificial Intelligence and Deep Learning.



Engaging students in creating AI-based innovations to address societal issues and industry problems



Computer Science and Engineering?
Choose SREC today.

SOFIA: FIRST AI POWERED HUMANOID ROBOT

- RAMPELLI SAI MANOGNYA (19K41A0582)

A robot built by scientists that takes over the human structure for utilitarian purposes like interacting with human tools and environment, experimental purposes, etc. is called a humanoid robot. As mentioned, a humanoid robot resembles its body shape to that of a human structure, hence it has a head, a torso, two arms and legs and a few of the humanoid robots are designed to copy human facial features such as eyes, nose, and mouth.

One of the best examples of a humanoid robot is Sofia, a social humanoid robot developed by Hanson Robotics in Hong Kong. It was created in the year 2016 by the inventor David Hanson. Sofia has the ability to process visual data, conversational data, also emotional data and use all of this to form relationships with people. She can hold natural conversations with people. She also has the capability to sing using her Artificial Intelligence voice and she sang a duet with Jimmy Fallon on 'The Tonight Show'. In 2018, Sofia was upgraded with functional legs and the ability to walk. She has lifelike skin and can mirror more than 60 human expressions. In 2019, Sofia displayed her potential to create drawings and portraits.

Sofia is the first robot to receive a credit card and in 2017, she became the first robot citizen holding Saudi Arabia's citizenship. In November 2017, she was named the United Nations Development Program's first-ever Innovation Champion. Hanson Robotics received the prestigious Gold Medal of the 2018 Edison Best New Product Award for Sofia.

Sofia has at least 9 robot humanoid siblings who are also created by Hanson Robotics. In 2019, Hanson introduced 14- inch 'Little Sophia' with the motive to teach children learn coding like Python and Raspberry Pi.



Department Activities:

• Conferences/Seminars/workshops/FDPs Conducted:

- A one Week FDP on “IVR” conducted from 04-01-2021 to 08-01-2021 organized by department of CSE.
- A One Week Workshop on “Python Fundamentals” conducted from 10-02-2021 to 15-02-2021 organized by department of CSE.
- A Two-Week Workshop on “Service Now -Application Developer” conducted from 09-03-2021 to 04-04-2021 organized by department of CSE.

• Conferences/Seminars/workshops/FDPs Attended:

- P. Kumaraswamy attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Harshavardhan attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Bhavana Jamalpur attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Syed Nawaz Pasha attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Dr. D. Kothandaraman attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Kanegonda Ravi Chythanya attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Yerrolla Chanti attended FDP on " Immersive Virtual Reality" from 4th-8th Jan, 2021.
- Dr. D. Kothandaraman attended FDP on " Robotics " from 18th-22nd Jan, 2021.
- Syed Nawaz Pasha attended FDP on "Cyber Security" from 29th-30th Jan, 2021.
- Kothakonda Chandhar attended FDP on "Cyber Security" from 29th-30th Jan, 2021.
- Bhavana Jamalpur attended FDP on " Data Sciences" from 15th-19th Feb 2021.
- P Anil Kishan attended FDP on " Immersive Virtual Reality" from 4th-8th Jan 2021.
- Kothakonda Chandhar attended FDP on " Data Sciences" from 15th-19th Feb 2021.
- Bhavana Jamalpur attended FDP(STTP) on "Digital Skill Development for Professionals" from 22nd-27th Feb, 2021.
- P. Pramod Kumar attended FDP on "Artificial Intelligence, machine Learning and Deep Learning" from 1st-5th Feb, 2021
- S Naresh Kumar attended FDP on "Artificial Intelligence, machine Learning and Deep Learning" from 1st-5th Feb, 2021.
- S. Tharun Reddy attended FDP on "AI and ML Applications in Data Science" from 22nd -26th Feb, 2021
- Dr. D. Kothandaraman attended FDP on " MATLAB and LABVIEW Programming" from 22nd Feb to 3rd Mar, 2021
- S. Shivaprasad attended FDP on " MATLAB and LABVIEW Programming" from 22nd Feb to 3rd Mar, 2021
- Kanegonda Ravi Chythanya attended in AICTE Sponsored STTP on “IoT Simulation by Fog Computing and Edge Computing using Open-source Tools” from 15th to 20th Feb 2021.
- Dr. Seena Naik Korra attended FDP on " Immersive Virtual Reality" from 4th-10th Mar, 2021.
- Kanegonda Ravi Chythanya participated in NPTEL-AICTE A Two-Week Faculty Development Program on “The Joy of Computing using Python”.
- Dr. Kirankumar Eranki attended FDP on "Artificial Intelligence and its Societal Applications" from 22nd -27th Mar, 2021.
- P. Pramod Kumar attended FDP on "DevOps Workshop on Automating Software Lifecycle in E-Comm" from 3rd-4th Apr, 2021.
- Kanegonda Ravi Chythanya participated in ATAL Academy sponsored online FDP on “Blended Learning and Flipped Classroom” at National Institute of Technical Teachers Training & Research, Chandigarh from 8th – 12th Feb 2021.
- Bhavana Jamalpur attended FDP on "Data Science for All" from 12th-23rd Apr 2021
- S. Tharun Reddy attended FDP on "Medical Image Processing & It's Applications in Automated Disease Detection" from 19th -24th Apr 2021.

What's new in MS Excel 2019

- MULA THARUNKUMAR (19K41A0576)

Microsoft Excel is a spreadsheet designed by Microsoft. It provides features of creating, viewing, editing files quickly and easily with just a few clicks. Continuous improvements have been a part of the development process.

Excel has now come up with an upgraded version Excel 2019 with more enhanced features and more functions too.

Functions which have been improved include:

- i) **CONCAT:** It functions the same as the earlier CONCATENATE. So, being shorter it is easier to type and supports range references.
- ii) **IFS:** This function allows the conditions to be tested in our specified order. If it is passed, the result is returned.
- iii) **MAXIFS:** It returns the largest number in a range meeting a single or multiple criteria.
- iv) **MINIFS:** It works similar to MAXIFS, the only difference being it returns the smallest number in a range, that meets a single or multiple criteria.
- v) **SWITCH:** This function evaluates an expression against a list of values in order, and returns the first matching result. If no results match, then "else" is returned.
- vi) **TEXTJOIN:** This function combines text from multiple ranges, and each item is separated by a delimiter that is specified by the user.

New Charts that have been added:

- i) **Map Charts:** It allows comparing values and shows categories across geographical regions. This can be used when we have Geographical regions like states/countries/postal codes in our data.
- ii) **Funnel Charts:** It is used to show values where multiple stages in a process are developed.

Some Enhanced Visuals too:

- i) **Scalable Vector Graphics (SVG):** The documents, worksheets and presentations can be made visually more interesting through its use. It also has filters applied to them.
- ii) **Conversion of SVG icons to shapes:** All the SVG pictures and icons can be transformed into Office shapes and their color, size and texture can also be changed.
- iii) **Insertion of 3D models to see angles:** To increase the visual and creative impact, it can be used and also be rotated through the entire 360 degrees.

- **Faculty Publications:**

- **International Conferences:**

- Rajesh Mothe, S. Tharun Reddy, B. Vijay Kumar, A. Rajeshwar Rao, Kanegonda Ravi Chythanya, "A Review on Big Data Analytics in Internet of Things (IoT) and Its Roles, Applications and Challenges" in 2nd International Conference on Data Science, Machine Learning and Applications and part of Lecture Notes in Electrical Engineering book series (LNEE, volume 783).
 - Bhavana Jamalpur, Kafila, Kanegonda Ravi Chythanya, Komuravelly Sudheer Kumar, "A comprehensive overview of online education – Impact on engineering students during COVID-19", in Materials Today.
 - Dr. P.Kumaraswamy Asst Prof published a paper entitled "Public key authentication schemes in Asymmetric key cryptography Architecture for Smart Manufacturing", Materials Today: Proceedings (ELSEVIER), Feb 2021.
 - Dr. D. Kothandarama Asst Prof published a paper entitled "Sequence number based secure routing algorithm for IoT networks", Materials Today: Proceedings (ELSEVIER), Feb 2021.
 - Dr. D. Kothandarama Asst Prof published a paper entitled "BLE in IoT: Improved Link Stability and Energy Conservation using Fuzzy Approach for Smart Homes Automation", Materials Today: Proceedings (ELSEVIER), Feb 2021.

- **Achievements:**

- Mr. P. Kumara Swamy Asst Prof was awarded by the degree of Ph.D. from Department of CSE, JNTUH Hyderabad on 16-10-2020.
 - Mr. G. Sunil Asst Prof, qualified UGC-NET in Dec-2020.
 - Mr. Rajesh Mothe Asst Prof, qualified UGC-NET in Dec-2020.

- **Patents Published:**

- Sallauddin Md, Asst Prof, Dr. R. Vijayaprakash, Dadi Ramesh, Dr. P. Praveen and Mohammed Ali Shaik got a patent entitled "Covering Means for Outdoor Arenas"
 - Dr. P. Kumaraswamy and Dr. C. V. Guru Rao got a patent entitled "An Authentication Scheme Using Public Key Cryptography".

Reusable Rockets by SpaceX

- KOTHAPALLI SAI YAMINI (19K41A05D0)

Reusable rockets or Reusable Launch Vehicles (RLVs) have always been a highly anticipated dream for many scientists because if we find a way to reuse space rockets efficiently and repeatedly as we travel by airplanes, then the cost of a trip to space is likely to be reduced by a factor of a hundred.

Apart from cost reduction, the aim is also to build strong, durable, and reusable launch vehicles that are capable to carry humans to Mars and other places in our solar system as well. Previous and existing space technology makes one-way space trips a very expensive deal and if it involves humans then the budget of that mission alone could be equal to the GDP of an entire nation that is why reusable rockets have become the need of the hour.

SpaceX

Space Exploration Technologies Corporation, better known as SpaceX is a private American company dealing in space transportation and aerospace manufacturer. It was founded in 2002 by Elon Musk. The goal of the organization is to make space transportation economical and enable human colonization on Mars.

Reusable Launch System Program

SpaceX is dedicated towards the goal of reusability of space rockets and aims to again launch a rocket within few hours of its return. Long-term objectives involve making return a first stage launch flight to the launch site within few minutes and to return second stage flight to the launch pad by following an orbital realignment with the launch site and re entry in atmosphere in up to 24 hours. The program was announced publicly in 2011.

The initial attempt involved launching of first stage Falcon 1 rocket and it was intended to land by using parachute however it didn't survive the reentry into the atmosphere. After making further unsuccessful attempts, they finally switched to power descent landing system. Nonetheless, they continued to make an effort and improve. They continuously made changes in the models and conducted numerous test flights.

Their initial rocket was called Falcon 9, it is the first reusable rocket and designed to carry people and payload across the orbit and further. The second rocket was named Falcon Heavy, it is one of the most powerful rockets in the world which can carry 64 metric tons of weight and it consists of 3-Falcon 9 engines which help to generate about more than 5 million pounds of thrust. Their other rockets include Dragon and Star ship. Dragon is capable of carrying 7 humans to earth orbit and beyond it. On the other hand, Star ship is designed to carry more weight, therefore, more humans to Moon, Mars and beyond. The reusable vehicles, that is, Falcon 9 and Falcon Heavy both have been tested successfully. SpaceX is working on Dragon and Star ship which will prove to be a technological marvel when completed.

Working process of Reusable Rockets

Flight Plan

- Falcon 9 is a two-stage rocket. Initially, it is lifted off and carried to an altitude of about 100 km with the help of nine rockets first stage booster. At this point in space, the second stage separates and it fires its single-engine to carry a payload into the orbit. Meanwhile, the first stage returns back to Earth.

Cold gas thrusters

- Small thrusters are equipped, on the nose of first-stage boosters, which vent nitrogen. After it separates from the second stage, then a controlled amount of blast flips the rocket in order to prepare its relanding in the ground.

Fuel Tank

- Rockets use the last drop of fuel in order to carry the payload. However, these reusable rockets carry extra fuel. After the flip, the 3 engines of the first stage reignite themselves which helps to slow down the velocity of the rocket while it is re-entering. These engines again fire up when the rocket reaches very near to the landing platform. In total, these engines help to reduce the speed of the rocket from 4700 km/h (in space) to 20 km/h (while landing on the ground).

Engines

- Falcon 9 rocket uses nine Merlin-1 engines, which provide it with a tremendous amount of thrust during the lift-off. In order to maintain the stability of the rocket, these 9 engines are arranged in a specific if the pattern is designed by SpaceX which is called 'Octaweb', in this configuration one central engine is surrounded by the other eight and here, each engine can control itself during ascent, positioning, and landing.

Grid fins(steering)

- Grid fins are in the shape of large tennis rackets. After the first stage rocket slows down using the ignition of three engines, then these heat resistant fins come out from the side of the boosters. These fins help to steer the rocket properly while returning to the landing site.

Onboard computers

- There are dozens of computers and sensors which are present on the rocket which provides instantaneous data on the velocity, altitude, air pressure, etc. These also help in reacting immediately to the changing circumstances while landing.

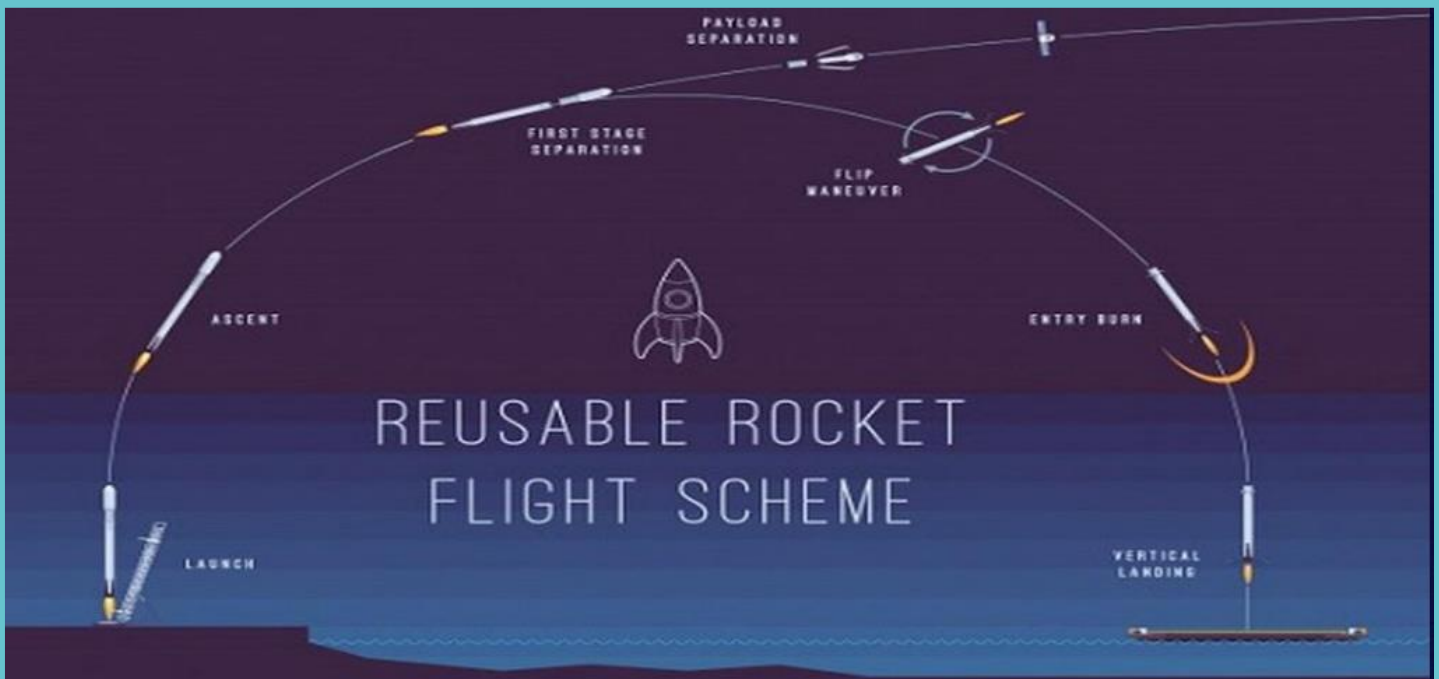
Landing legs

- There are 4 legs present on the rockets which are made out of lightweight and durable carbon fiber, these legs deploy automatically while landing stage. Each leg also consists of a shock-absorbing mechanism which further support the landing.

Drone barge

- These rockets like the other ones are launched near ocean areas. So, while landing, it is economical to land the first stage booster on the water surface rather than the original launch site as otherwise, it would require more expensive fuel to make it land on the ground. After the rocket touches the sea surface, then it is shipped back to the launch site.

Apart from SpaceX, even India's ISRO is developing interest in the area of Reusable Launch Vehicles systems. With the passage of time more and more momentum is being gained by these projects as they not only help to save cost but also make possible for humans to explore and settle in other parts of our solar system, an idea which a few decades before seemed to be nothing more than a sci-fi movie.





A Two-Week Student Development Programme on ServiceNow

TOP 10 FREE Android Apps to Get Started in Music Production

- KODAKANDLA SRIJA (18K41A05E4)

Basic Setup for Music Production

Music Production requires great talent, not money. Many music lovers end up producing music just because they can't spend a lot of money on Music. Guys, don't worry. In this article, you will learn how to start your career with zero investment.

Here is the list of Top 10 Apps for Android.

1. FL Studio Mobile
2. Audio Evolution Mobile Studio
3. BandLab
4. n-Track Studio
5. BandPass
6. SoundTrap
7. Zquence Studio
8. Music Studio
9. Walk Band
10. DRC-Polyphonic Synthesiser (Only Synthesiser)

1) FI Studio Mobile

FL Studio Mobile by Image-line is the best ever app for music production in your Android. With this app, you can have access to thousands of instruments.

Features

- Step Sequencer (velocity, pitch, tracks, swing)
- Playlist/Piano roll (copy/paste, snap, loop)
- Recording (snap notes, levels)
- Rack (add FX, presets, automate, add tracks)
- Mixer(controls).

2) Studio Audio Evaluation Mobile Studio

Audio Evolution Mobile Studio by eXtream Software Developments is also a good app for basic Music Production. From recording song ideas to full-fledged mobile productions, Audio Evolution Mobile sets the quality for music creation on Android.

Features

- Whether you are recording using mic or recording from a multi-channel USB audio (*) or MIDI interface, Audio Evolution Mobile rival's desktop DAWs.
- Featuring editing with unlimited undo/redo, virtual instruments, real-time effects, mixer automation, audio loops, drum pattern editing and many more
- The app will give you endless creativity options.

3) Bandlab:

BandLab — Music Recording Studio & Social Network is the next best app for music production. Import a track or create your music from scratch and share it.

- 100% Free Online DAW
- Universal FX and Presets
- Synced to Cloud
- Collaborate anytime, anywhere
- Import/Record live audio.

4) N-Track Studio

n-Track Studio by n-Track Softwares is a powerful, portable music-making app that turns your Android device into a complete Recording Studio & Beat Maker.

- Stereo & Mono audio tracks
- Step Sequencer Beat Maker
- MIDI Tracks with built-in Synths
- Loop Browser & in-app Sample Packs
- Virtually unlimited number of tracks
- Group & Aux channels
- Piano-roll MIDI Editor
- On-screen MIDI keyboard.

5) BandPass Pa

BandPass by Lunar Labs is an early access application and next best app for music production. Bandpass is a mobile music production and musical social network.

Features:

- Over 3000+ Samples
- Scaled instruments to re-create real orchestral sounds
- FM and additive synthesizers to make a huge combination of wave shapes
- Automation tracks to change filters and effects over time
- Sampler, Vocoder, TrackStacker, DrumSynth etc.

- Use live mix with the looper and build songs with the song editor
- You can export songs to your device or straight to SoundCloud.

6. Sound Trap

Here comes the 6th top Music Making app Sound Trap by very well known music streaming company Spotify Inc. You can make music online on this wonderful app.

Features

- Create music with a great set of high-quality, professional loops.
- Record vocals, electric guitars, acoustic guitar, bass and more.
- Use the preamp and a large number of high-quality guitar, bass and vocal effects
- Play and enjoy the built-in sampled instruments (piano, organ, synths, drums)
- Save your recordings in the cloud
- Invite friends to collaborate on the recording using, for instance, video chat possibilities
- Share your recordings on Facebook, Twitter and SoundCloud
- Distribute and share your music on iTunes, Deezer, Spotify, Rhapsody and Google play
- Available on Windows, Mac, Chromebook, Linux, iOS and Android

7) Zquence Studio

Here is the Zquence Studio by Riccson. A complete DAW application in which you can create music with unlimited synthesizers, mixer channels and effects.

Features:

- Pattern sequencer
- Automation
- Modulizer synthesizer/effect (Modular synthesizer/effect)
- Unlimited synthesizers
- Unlimited mixer channels
- Midi export/import
- Wave/Flac export
- Wave/Flac/Ogg import
- Midi port in/out
- Recording Mic/Midi
- Touchscreen pinch/zoom
- Available on Android, Windows Phone 8.1, Windows 8.1 and Windows 10
- Available on Windows, Mac, Chromebook, Linux, iOS and Android

8) Music Studio

Music Studio by Alexander Gross is a free music app which offers an entire music production environment for mobile devices.

Features:

- Instant positioning via the slide gesture and resize with the pinch gesture
- 183 studio-recorded instruments (16bit 44.1kHz sampled from real instruments)
- 123 free instruments, 60 available in the in-app shop
- 6 categories: symphonic, classical, band, electronic, world, drum kits
- Release and attack time configurable per instrument
- Sustain samples
- Waveform and audio region editing
- Low-latency, highly optimized, 128x polyphony, battery-saving audio engine
- 100 drum loops
- 6 real-time effects with lots of parameters like Reverb, Delay, 3-Band-Equalizer, Filter, Amp, Limiter.

9. Walk Band

Walk band by revontulet soft inc. is the least preferred but also a good music-making app for android. You can find the basic features of a work station in it.

Features:

- Piano keyboard
- Guitar and solo & chords mode
- Bass and guitar solo & chords mode
- Drum pad & kit mode
- Drum Machine, Beats pad Mode
- USB MIDI peripheral keyboard support
- MIDI track recording & editing
- Voice track recording & editing
- Piano roll mode editing
- MIDI to MP3 conversion.

10) DRC- Polyphonic Synthesister

And here comes the best Synthesister app. DRC Polyphonic Synthesister is a have powerful analog Synthesister by imaginandul0 LDA. You can't find another app than this. But the thing is it doesn't provide multitrack recording option. But all other features are awesome and the interface is mind-blowing.

Features:

- Up to 8 voices
- Two main oscillators, one sub oscillator and one noise source
- Detune sync and ring modulation
- 4 pole self-resonant low pass ladder filter
- 2 pole multi mode filter (LP,HP,BD,NOTCH)
- 2 LFO's and 2 analog modeled envelop generators
- Stereotape delay with time modulation
- Lush stereo reveb with modulation and self-growing decay.
- True stereo, analog modelled multi mode chorus.
- Arpeggiator with 4 modes, temp synch and hold function.

• **Students Placement**

S. No.	Name of the Company	No. of Students Placed
1	Accenture	60
2	Acel Alpha	1
3	BYJUS	2
4	Capgemini	2
5	Cloudthat (Intern)	1
6	CTS	14
7	DBS	2
8	DXC	16
9	E-Abyaas	1
10	Eros Inc	1
11	HCL	1
12	Infosys	6
13	L & T	2
14	Mindtree	2
15	NIIT	1
16	Purple talk	1
17	TCS Digital	1
18	TCS Ninja	4
19	Tvarana Software Solutions	3
20	Wipro	1
21	Wipro Turbo	1

accenture
High performance. Delivered.

tcs TATA
CONSULTANCY
SERVICES

DXC
TECHNOLOGY

HCL **wipro** **tvarana**

S. No.	HTNO	Student Name	Branch	Company Name	Package
1	17K41A05A4	KATAKAM ROHAN	CSE	BYJUS	10
2	17K41A0535	CHOLLETI PRATHYUUSHA	CSE	DBS	7.86
3	17K41A05A5	KRISHNA TEJA JILLELAMUDI	CSE	TCS Digital	7
4	17K41A0538	JAMPALA REETHI	CSE	Accenture	6.5
5	17K41A0585	REVURI VEENU AMRAPALI	CSE	Accenture	6.5
6	17K41A0588	YASHWANTH REDDY ALETI	CSE	Accenture	6.5
7	17K41A0550	RUDROJU VISHWAK SENA PRIYA	CSE	Byjus	4.75
8	17K41A0502	BOMMINENI ALEKHYA	CSE	Accenture	4.5
9	17K41A0505	CHENNA ANVESH	CSE	Accenture	4.5
10	17K41A0506	CHIRRA SAI RAHUL	CSE	Accenture	4.5
11	17K41A0507	DORI RAMYASREE	CSE	Accenture	4.5
12	17K41A0514	MATLA RAJKUMAR	CSE	Accenture	4.5
13	17K41A0518	MUDIKE DEEPAK YADAV	CSE	Accenture	4.5
14	17K41A0522	PANDARKAR SHIVANI	CSE	Accenture	4.5
15	17K41A0526	SANDASANI MANSI	CSE	Accenture	4.5
16	17K41A0539	KAMPELLI SRICHARITHA	CSE	Accenture	4.5
17	17K41A0540	KANDAKATLA LOHITH	CSE	Accenture	4.5
18	17K41A0543	KOKKULA SHRAVYA	CSE	Accenture	4.5
19	17K41A0546	MALLURU VENKATA SRAVYA	CSE	Accenture	4.5
20	17K41A0550	RUDROJU VISHWAK SENA PRIYA	CSE	Accenture	4.5
21	17K41A0551	SAI KRISHNA PERUKA	CSE	Accenture	4.5
22	17K41A0552	SEETHA SATHISH	CSE	Accenture	4.5
23	17K41A0558	YERRA NITIN	CSE	Accenture	4.5
24	17K41A0559	ABHISHEK NAMANY	CSE	Accenture	4.5
25	17K41A0566	GARIMILLA PRATHYUSHA	CSE	Accenture	4.5
26	17K41A0567	GUDIMALLA JEEVANA	CSE	Accenture	4.5
27	17K41A0570	KURAPATI SAI KIRAN	CSE	Accenture	4.5
28	17K41A0571	LOKE BHAVIKA	CSE	Accenture	4.5
29	17K41A0578	PALLERLA SHRAVYA	CSE	Accenture	4.5
30	17K41A0584	RAPALA NIKITHA	CSE	Accenture	4.5
31	17k41A0596	GONE SHIRINI	CSE	Accenture	4.5
32	17K41A0597	GUDIKANDULA KAVYA	CSE	Accenture	4.5
33	17K41A0599	JAMALPUR AKHILA	CSE	Accenture	4.5
34	17K41A05A2	KAMARAPU SHARANYA	CSE	Accenture	4.5
35	17K41A05A3	KASAGANI SRAVANI	CSE	Accenture	4.5
36	17k41a05a9	NETHETLA KEERTHANA	CSE	Accenture	4.5
37	17K41A05B6	SEETHAMSETTY HIMASREE	CSE	Accenture	4.5
38	17K41A05B7	THAKKALAPELLY GEETHANJALI	CSE	Accenture	4.5
39	17K41A05C1	BHANDARI ANJALI	CSE	Accenture	4.5
40	17K41A05C5	DEVERA PRANEETHA	CSE	Accenture	4.5

S. No.	HTNO	Student Name	Branch	Company Name	Package
41	17K41A05C8	GOPIREDDY SURAJ	CSE	Accenture	4.5
42	17K41A05D3	KUNDURU NIKHITHA	CSE	Accenture	4.5
43	17K41A05D7	PULUMATI SINDHUJA	CSE	Accenture	4.5
44	17K41A05E5	YAMSANI SHASHANK	CSE	Accenture	4.5
45	17K41A05E9	CHIDURALA NAMRATHA	CSE	Accenture	4.5
46	17K41A05F2	GADDALA DEEPTHI	CSE	Accenture	4.5
47	17K41A05F9	LEDALLA SHIVANI	CSE	Accenture	4.5
48	17K41A05G4	NOOTHI SNEHA	CSE	Accenture	4.5
49	17K41A05H3	VAKULABHARANAM SAI SREE	CSE	Accenture	4.5
50	17K41A05H4	VANAMA SHRUTHI	CSE	Accenture	4.5
51	17K41A0536	GADDAM CHANDANA	CSE	Keste	4.5
52	17K41A0511	MADIREDDY SREEJA	CSE	Accenture	4.5
53	17K41A0524	PENDLI SHIVANI	CSE	Accenture	4.5
54	17K41A0533	BOMMAGANI SATHYASREE	CSE	Accenture	4.5
55	17K41A0544	MADARAPU SHREYA	CSE	Accenture	4.5
56	17K41A0562	BAYYA RAHUL	CSE	Accenture	4.5
57	17K41A0592	BANOTHU ANILKUMAR	CSE	Accenture	4.5
58	17K41A05B9	ANUMANDLA AKASH	CSE	Accenture	4.5
59	17K41A05C7	GAJULA PRASANNA	CSE	Accenture	4.5
60	17K41A05E7	KONDURI SINDHU	CSE	Accenture	4.5
61	17K41A05H0	THATIPAMULA CHAKRAVARTHI	CSE	Accenture	4.5
62	17K41A0542	KODIPAKA NIKITHA	CSE	Accenture	4.5
63	17K41A0569	KARRA JAYANTH REDDY	CSE	Accenture	4.5
64	18K45A0502	VYDYA ABHIRAM	CSE	Accenture	4.5
65	17K41A0544	MADARAPU SRIYA	CSE	Cloudthat (Intern)	4.1
66	17K41A0424	PULYALA LAXMI PRASANNA	CSE	Cloudthat (Intern)	4.1
67	17K41A0511	MADIREDDY SREEJA	CSE	CTS	4
68	17K41A0522	PANDARKAR SHIVANI	CSE	CTS	4
69	17K41A0529	YERRA NIMISHA	CSE	CTS	4
70	17K41A0549	PALLE ANUDEEP REDDY	CSE	CTS	4
71	17K41A0562	BAYYA RAHUL	CSE	CTS	4
72	17K41A0566	GARIMILLA PRATHYUSHA	CSE	CTS	4
73	17K41A0569	KARRA JAYANTH REDDY	CSE	CTS	4
74	17K41A0583	NELLUTLA RAKSHITH	CSE	CTS	4
75	17K41A05A3	KASAGANI SRAVANI	CSE	CTS	4
76	17K41A05A4	KATAKAM ROHAN	CSE	CTS	4
77	17K41A05B7	THAKKALAPPELLY GEETHANJALI	CSE	CTS	4
78	17K41A05C7	GAJULA PRASANNA	CSE	CTS	4
79	17K41A05C8	GOPIREDDY SURAJ	CSE	CTS	4
80	17K41A05C9	GUNDA PREETHI	CSE	CTS	4



134 **RANK IN ENGINEERING CATEGORY**
Rank band of 151-200 in overall category

