Why did you choose this particular course?

The world is progressing fast, there are new products needed to match the requirements of this progress. We use of maths and science to solve problems and create new products and services. As an electrical and computer engineer I will work at the heart of the most rapidly developing technology humankind has ever seen. Electrical and computer engineering is at the heart of most current technological breakthroughs. Any device with an energy or IT component is derived from ECE knowledge. From providing accurate medical diagnoses at a distance to exploring distant planets, ECE plays a crucial role. This dependency on ECE motivated me to pick this department.

What interests you about this field?

The progress in the field of automation, robotics, signal processing, and the reliance of every field in this present generation on this field, and my background of being strong in mathematics and physics made me choose Electronics and communication in my under graduate studies ,and this gave me a quest of learning more and creating a world that is easy to live in and my strengths of mathematics ,signal processing and coding interests me about this field. The seminar I attended on 5g conducted by nokia and the training I attended on the sixth sense technology( wearable gestural interface that augments the physical world) conducted by Technophilia systems have drawn my interest.

what and when were the major moments in your life that have led you to your current course interest?

From my childhood I was always interested in technology, and the first time when I saw my tv being repaired I desperately wanted to know how that was working, and that urge to explore has brought me this far and as time progressed the doubts started increasing and when I attended sixth sense training I definitely got interested in signal processing and the things that can be achived using it.

Specific classes or special courses that you have taken, which are related to your field of interest.

As being from ECE domain I have participated in a numorous trainings and I have taken courses on iot ,java ,cadence and python programming.

What knowledge do you have in this field? What is your opinion about the current status and future of this field?

I posses a great knowledge in this field as I m from the same field, as what I see in the future is the entire world relaying on this particular field as everything now a days is being automated and to process complex signals this field is very necessary.

What and who influenced your decision and interest (role-model). What quality about them appeals to you?

Elon musk has influenced me a lot in choosing this field as what he deals with and dreams of is all the job of an ECE engineer and his far sightedness, his passion towards achieving dreams that seem impossible to others and his hard working nature appeals to me.

Browse through the website of the University’s department/program of interest to you and highlight the aspects of the program that appeal to you. These should include 2-3 specific courses and professor names (with their area of expertise)

The department that interested me is electrical and computer engineering, and the programs that interest me are the controls and robotics in this enabling robots to better perceive and operate in variable and uncertain real-world environments exits me and also would like to work under “susan hackwood” who is expertised in computer vision, 3D modeling and image processing and “jay a Farrell”. Similarly the other fields that intrests me are the communication and signal processing which is thought by “llya duner” and “Amit K Roy chourdhury” and Computer engineering thought by hyoseung kim.

**Why did you choose to study in this particular country? What do you like about it?**

**Summarize your previous education and experience.**

**Please provide description of your academic background in the field you have chosen.**

I am from electronics and communication background, and the field I have chosen is electrical and computer engineering where every subject is a derivative of the ECE domain, and having an excellent knowledge on the core subjects, and enjoy to study and explore those subjects. My favourite subjects are Signal processing subjects such as(Signals and systems, Digital signal processing, Digital communication , analog communication, image processing).And having a work experience of more that one year and having worked in a core company that does image processing will put me ahead of others in terms of practical experience.

**Give details of the research you have conducted. Indicate with whom, the title of the project, what your responsibilities were, and the outcome. Write technically, or in the style of your discipline, using words specific to your field. Professors are the people who read these statements. Also discuss any challenges that you might have faced in doing these projects and state how you overcame them.**

I had worked on intelligent driver assistance system where we dealt with 4 cases, this project was performed under the guidance of professor Mamatha. In this project we helped the driver in detecting the obstacles in not so clearly visible environment and also alerted the driver before the obstacles occurred. Secondly we designed a system which could tell the driver the amount of acceleration required with respect to his current velocity(To achieve this we had implemented a overtaking sight distance formula).The third case was restricting the speed of the vehicle in the speed limited zones.

**Mention any important paper or thesis project you have completed, as well as anything scholarly beyond your curricular requirements.**

I have always been a very active person throughout my life, I have presented many seminars and not only that I have also participated in many coding challenges, technology games and hackathons. The notable ones are the e-Yantra which was conducted by IIT-Bombay. I have made many projects one of my favourite is the Geofence creation for child monitoring.

**Work experience, especially if you had any kind of responsibility for testing, designing, researching or interning in an area similar to what you wish to study in graduate school.**

When I worked at Adisys(R&D) pvt ltd I had worked on image processing, that is enhancing the image using machine learning, and object detection using deeplearning. In this we had to train the system on our dataset and help the system recognise the number of trucks entering and leaving the port.

**What does the company do (business activity) and why being in this company has been beneficial for you?**

I am currently working at SASKEN Technologies pvt ltd. Sasken provides Product Engineering and Digital Transformation services .In this company I m working as a software engineer in the Digital R&D. Here I m working on an internal project, in which we are trying to improve the security of wirelessly transmitted data. This a totally new field for me,but I could cope up and now I am up to the mark .Majorly this project demanded a lot of coding from me(which I love to do),and also let me understand all the protocols and other theory related to this.

**Is your experience related to your choice of degree? If the experience is not aligned to the program you have chosen, indicate why you are switching to the desired course. Write in detail your motivation for changing**

Presently I m working more on coding and the work I am doing has a good relevance to the field of major I am trying for. But in the current field I am working is slightly deviated from what I have studied in my under graduation which has motivated me and put an urge in me to invent and explore everything related to robotics, physical chip designing and so on. I feel that the course I am opting for is the heart of everything in the world, the entire future of the world stands on electrical engineers as everything is getting automated, the signal processing, communication everything is related to this field.

**Discuss the relevance of your past education and activities to the course you are applying?**

**Explain any inconsistencies in your records or scores? (Any backlogs or gaps).**

I have always been a consistent student and there are no backlogs or gaps in my education. Indeed I have got a first class with distinction in my degree certificate.

**Mention about your projects/ seminars/ presentations/ publications in your academic field.**

In have worked on many projects throughout my under graduation.

* Intelligent driver assistance: Created a processor-based control system that would intimate the driver obstacles ahead, limiting the speed in speed restricted areas, and helping to overtake.
* gear display system in bikes: created a gear display system using 8085 microprocessors, a hall sensor and display. the hall sensor would detect the motion of the gear rod and would take the corresponding action of counting up or down.
* conversion of non-touch screen to touch screen: made the non-touch screen monitor into a touch screen monitor using accelerometer that enables to read the 3 coordinates, analog to digital convertor converts the obtained signals and gives to the processor where corresponding action to be taken.
* image detection and alerting: to check if any element is stuck after the moulding process in the moulding machine.

All the above projects were in my under graduation.

In my job I did many more projects such as

* geofence creation and monitoring: enabling the parent to create/draw a fence on the map, and enable the parent to activate and monitor the kid’s location in real time
* multiple pick up points in the way from source to destination: to enable real time monitoring for parents and the driver along all the points in between source and the destination.
* real time monitoring of energy meters and updating: To check if the energy meter in the industry is working or not and if not working alert the employees and if working see if it in the norms and creating a UI for this.
* real time object detection with deep learning: In this our task was to monitor a region of interest with deep learning and if any other obstacles are present other than the predefined then alert by rising an alarm.

**Any community service or your leadership experience while in college.**

I was the class representative and was an active participant in the department activities. I had an opportunity to suggest a change in the departmental activities that would appreciate many more students actively participate, for this I gave an idea of opening an forum for the department and give each class a chance of doing some kind of activity related to the department. This was an success and I was awarded the best idea for departmental progress award.

**Share any interesting details that prove your claims about yourself, for example, an initiative that you took or idea that you proposed and for which you were appreciated**

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**What do you want to do after completing this degree?**

**How do you want your career to develop after your studies, for example, you want to do a Ph.D., develop a career in academia, research, development, the public sector, consultancy, etc.?**

I want to do research and continue my passion.

**If you mention research as your objective, please be specific with which area interests you, keeping in mind the course you have applied for. Is it in line with your goal also your experience and academics?**

I want to do research on image processing and want to automate objects.

**How do your interests and goals match with the program you are applying for?**