

Education is gold, knowledge is power and learning is continuous. The world has greatly developed today because man continued in learning and in its application, solved his problems. After spending five years at Bleep University, Nigeria studying and applying electrical engineering, a graduate education from a renowned institution with world class instructors and well equipped facilities will put me in the right track of realizing my dreams in researching and solving engineering related problem; hence my application to this programme.

I got a merit scholarship to study electrical engineering at the University of Bleep which was the first step in the realization of my dream. There I learnt a lot about electronics, control and power which formed my foundational understanding in that field. I graduated with a high GPA of Bleep reflecting my passion for the course. Due to lack of facilities in control, I had to major in electronics and power combined in my final year.

During my study at the university, I participated in a lot of mini project and contributed immensely to the IEEE student chapter in my school. Some of the projects we did include Arduino based metal detectors, voice recording and amplification, circuit designs, coding of some common micro-controllers and solving control related problems using fuzzy logic and genetic algorithm. In my third year at the department, we teamed up with students from mechanical engineering department to work on a university funded biogas project.

I got more interested in power electronics and control during my internship at Bleep Company, a leading electronic company in Ibadan, Nigeria. The company had a well-equipped laboratory for the design and implementation of electrical circuits. There, I learnt the proper use of software's like Proteus, VHDL, MATLAB and Simulink in designing and simulating circuits. EXPRESS PCB was used to design PCB layouts and the boards were etched with chemicals, drilled and the electrical components were manually mounted and soldered. The company was majorly into Inverter Systems; Design, Fabrication and Installation and had a research team focused on getting better sine wave inverter output designs instead of modified ones. Before I completed my Intern with them, on my own I designed and built a personal 1.5kVA inverter for use in my room. It still works till today.

My undergraduate final year project was a research channelled toward the Nigerian energy sector. The National Power Authority in charge of power distribution imported new smart meters for use amongst citizens. These meters used some common metering chips like the ADE7755 metering chip which could not detect small changes in power. The project was the design and construction of an energy meter avoiding the use of metering chips and comparing its efficiency with the imported ones. Current and voltage signals were measured using appropriate sensors and calculations and display was done with an Atmega micro-controller interfaced to an LCD. To make the project more interesting, I added GSM module for wireless control and switching

Currently, am working as a control and power lab assistant at the University of Bleep. Because of lack of funding, there is currently no research going on. I assist with lab equipment's and aid in the teaching of undergraduate students. I also help undergraduate students on their final year project work. This is not too fulfilling for me because of my interest in 'real' research work, hence my application to your programme.

In addition to my academic studies, I was involved in various extracurricular activities. I was part of the university debate team. We won Bleep place at Etisalat Nigeria Merit Award and Debate competition. This was fulfilling to me as I am a person that loves to win. I was also the goal coordinator for Sustainable Goal Development group for one year. This group is under SDG where we go around educating people about the sustainable development goals of the United Nations and the part they are to play to ensure it comes to fulfilment. These experiences have helped me to mature and they have also improved my communication skills and leadership abilities.

In addition to reading and following recent trends on electrical magazines like the IEEE Spectrum, I have also attended many conference and workshops where I have had the chance to listen and learn from many prominent scholars that has further motivated my intention to research and study. I attend the yearly national engineering conference organized by the Nigerian Society of Nigeria. I have also attended some local awareness programmes organized by the student IEEE chapters and student chapters of Engineers without Borders.

I feel confident that I will be able to excel in your program as a result of my satisfactory coursework at the University of Bleep, my little research experience and the personal qualities developed through my extracurricular activities. I am very eager to continue my education and improve upon my weaknesses. I look forward to joining the faculty and department research teams and contributing toward the advancement of technology. I have made the best of my undergraduate education and I am certain with a chance at your institution, it will be a leap towards a great and successful career in electrical engineering.

My GRE score of Bleep presents me as a student capable of high reasoning and computational abilities. My TOEFL result aggregate of Bleep also shows that I can cope very well in an English academic environment. A high score of 27 in my TOEFL writing section emphasizes my good writing skills and a score of 26 in my TOEFL reading section shows that I am able to comprehend academic materials within a short time. I have a good background in Object Oriented Programming having coded and written game applications with JavaScript. I believe that learning new software's needed to succeed in research and learning will not be a problem. More so, I learn very fast.

During my study at the University of Bleep I won numerous awards and scholarships. I won the Shell SPDC University Scholarship Award and Etisalat Nigeria merit award in my second year at the university. I won the MTN Foundation Scholarship Award and Mobil/NNPC Scholarship Award in my third year at the university. In my final year at the university, I was named a university scholar.

To aid and improve my teaching skills, I ensured that my National Youth Service (a compulsory one year National service for all Nigerian graduates) was spent teaching. I taught calculus in a government owned high school. Also currently at the university of Bleep where I work as a lab assistant, I assist lecturers in some of the course work. During weekends, I also teach A-level Physics to A-level students at a study centre near the university.

To aid and improve my research skills, I have had to read up and follow on-going research in other universities abroad. My department receives little or no funding for research and most lecturers have to travel out of the country to implement their research, so I can't really join in or offer to help, contribute and learn.

I want to study at Bleep University because the university meets my criteria for a first class institution. The university has well equipped and modern facilities and professional instructors. It is well funded and the university also encourages extracurricular activities and has a well-structured student service and mentor program. A major attraction for me it's his high ranking in research. I visited the electrical power and systems group website and I was amazed at the team work and progress in research. There are also a lot of student work opportunities and the university alumni list is something to be proud of.

I have written papers on MOSFET control in inverter systems and done a little project with 3D printing. I am a graduate member of the Nigerian society of Engineers and contribute during conferences and monthly meetings.

I have research interest in circuit designs, control and power systems; their designs and applications. Smart grids and adjustable speed drives. Power electronics and optimizations of devices under it are also interesting. I also have interest in renewable energy and energy efficiencies of electrical equipment's. I am open and flexible to change in interests because I believe that exposure to information affects interest.

I have been making contacts with the department and in particular some research groups to signify my deep interests but they have not gotten back to me yet. I have contacted the VLSI and Systems and Control research group and also the Electrical power and Systems group. I am confident they will get back to me because we share similar interests and I hope to join their teams and contribute in every way I can to ground breaking research.

My short term goal is to engage myself fully in the doctorate programme. I am coming in for the direct-PhD program. I plan to learn a lot and contribute to the on-going research at the department. Through the university website, I can see a lot of work is going on at the research teams. I am confident that not only will this programme widen my understanding; it would also sharpen my researching skills. Working with well achieved and professional electrical engineers at your department will also boast my networking and enhance my career.

My long term goal is to engage in academic research for industries and universities and while doing that enjoy the prestige and reward the career offers. I also hope to teach and lecture college students alongside the research, ensuring that knowledge is transferred and technology advances. I am confident that my experience and skills will enable me to make notable contributions to your PhD programme and research teams. I promise to give it all my best and commitment. Thank you for taking your time to review my application.