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Flight has fascinated me since childhood, ever since I remember traveling by air for my summer vacation to Dubai. Even today, watching a video of an airliner that weighs hundreds of tons is breathtaking, especially when it lifts itself off the ground in style. Furthermore, the science behind defying gravity to transport goods and people across thousands of miles by cruising at near sonic speeds thousands of feet above the ground is astonishing. All this is possible only due to advancements in various sub-disciplines of aeronautics, especially in the area of aerospace propulsion.

Fascination with aircraft and flying grew up to the point of shear passion, galvanizing me to pursue undergraduate studies in Aerospace Engineering at the SRM University in spite of having an offer from another top university to study a Mathematics degree. My four-year undergraduate studies at SRM University earned me a reputation of being an aerospace nerd & a class topper. That was not only evident in my grades securing a GPA of 7.55, but also in my class participation skills. The head of the department introduced me to Aerospace Propulsion as a subject, and that is when I began to develop an interest in the discipline. In particular, what fascinated me about Gas Turbines was how it combined the Thermal Sciences into a single beautiful package, one that is a masterpiece of modern day aerospace engineering. This fact combined with the diversity of its application areas, and that I was the top performer among my cohorts in the aerospace engineering major, securing a GPA of 7.55, led me to choose this area of specialization.

I was the only student in my batch to get placed in a Multi-National Corporation, HCL Technologies during my final year through campus placement. I have two years of experience in working with HCL Technologies under the product aircraft wheels and braking systems as a Design Engineer. During this tenure, I gained experience in working with CATIA-V5 and *aircraft parts engineering drawings*. My passion and immense interest in aerospace engineering made me pursue my masters in Aerospace Engineering from a globally reputed university.

I have graduated from The University of Manchester with an MSc in Aerospace Engineering and I am looking forward to pursue my postgraduate studies. My professional goal is to take my career forward in doing a PhD. This motivated me to study a Master of Science in Aerospace Engineering from Manchester University. Moreover, I have undertaken my dissertation project on computational evaluation of rotor alone noise in aircraft engines using *ANSYS-Fluent*. Moreover, I have been trained in computational fluid dynamics software and undertaken two modules of computational fluid dynamics during my postgraduate studies. From my CV you would have noticed that my overall degree mark achieved was 2:1(Merit). However, I was able to learn from my mistakes during the taught module of the course and boosted my overall grades.

During my post-graduate studies at Manchester, I decided that pursuing a PhD in the area of propulsion and gas turbines would be the next step in my academic career, one that would help me attain my professional aim of contributing towards the cutting-edge research in either academia or in industrial R&D. Having already got exposed to European standards of education and teaching curriculum has developed in me a deep rooted passion to undertake post graduate research.

I have gained expertise on satellite manufacturing and materials used in satellite manufacturing during my internship at *AIRBUS, Stevenage, United Kingdom*. Furthermore, I gained experience about materials used in commercial aerospace industry and how the aircraft wings are built during my internship at *AIRBUS, Broughdon, United Kingdom*. This made me stay abreast with

the current trends in the industry and the advancements in the UK aerospace industry. My immense passion towards commercial aircrafts made me work in aviation industry. Post my graduations, I worked in commercial aviation industry, *JET AIRWAYS, Chennai, India* as a ground engineering staff. This work experience enlightened me in acquiring knowledge about the maintenance activities of real-time aircrafts flown in daily life and the application of aerospace technology in commercial aviation industry.

Further to the work experience, I took my career forward in research-oriented teaching as an *Assistant Professor* in Hindustan University. Before I could get started with my PhD I was eager to see how well I can fit in the teaching job and in academia. My contribution in academia at a very young age of twenty five gave me the motivation to pursue research to enhance my subject knowledge in aerospace engineering which will help me to impart new technical know how to students. Furthermore, inspire the next generation to take up a career in aerospace engineering by being a living role model. My present designation as *Assistant Professor* enabled me to stay abreast with the advances in the subject knowledge and to motivate students to pursue a career in the field of Aerospace Engineering. Moreover, I have been teaching trending topics in research fields to students especially in subjects such as Aerospace Propulsion, Computational Fluid Dynamics, Advanced Aerodynamics, Wind tunnel Techniques and Engineering optimization.

During, the course of my teaching profession, I had presented a paper on “Computational Evaluation of Rotor Alone Noise” in an international conference “ICON STEM 2016” held at Jeppiaar University, in Chennai on March 30th and 31st. Moreover, I had presented a paper on “Effect of Shockwave Boundary Layer Interaction on Supersonic Combustion in Scramjet Engines” in a National conference *LAMSYS-2016* held at SHAR, Sriharikota on June 29th and 30th and bagged the prestigious “Best Paper Award” at the valedictory function. I had recently presented a paper on “Aerothermodynamics Variations Associated with the Change of Shapes in the Re-entry Vehicles” in an international conference *NAFEMS-2016* on August 31st, Bangalore. Furthermore, I will be presented a paper “Modifying the onset of turbulence in low speed subsonic wind tunnel” in an international conference “National Society of Fluid Mechanics and Fluid Power (NSFMP)” held at Allahabad on December 15th -17th, 2016.

My Journal publication “Effect of Micro Vortex Generators in modifying the Shock Wave Boundary Layer Interaction in Scramjet Engine” published in, “Journal of Spacecraft and Technology (JST)” V28, ref. No. JST-V28 (1)-04, 2017. I have also presented paper titled “Comparison study of nozzle design and effect of shock reflection on the ideal nozzle expansion”, at 44th National Conference on Fluid Mechanics and Fluid Power, pp.1-5, Paper no: 5, FMFP 2017, December 14th and 16st in Amrita Institute, Kollam, Kerala, India. “Impact Analysis of Bird-Strike on Critical Components of the Aircraft”, at National Conference on Aerospace Technology, pp.28-29, Paper id: NCAT18141 and “Inverted Aerofoils and the Effect Of Camber On Ground Force In Formula One Cars”, at National Conference on Aerospace Technology, pp.35-36, Paper id: NCAT18137, NCAT 2018, September 27th and 28th in Hindustan Institute of Technology and Science, Padur, India. My latest conference paper is “Computational investigation of calibration characteristics of a five hole probe paper no: 68 in National Aerospace Propulsion conference NAPC-Kharagpur.

I am passionate about having an academic career in Aerospace Engineering as I have really enjoyed my teaching experience and I am eager to build up on the technical expertise I have gained. Moreover, without any financial support from my university, I have gathered interest and momentum to present my paper in three international and one national conference in a very short period of time. I have also become an associate member of *Aeronautical Society of India*,

life member of *Indian Society of Systems for Science and Engineering (ISSE) Chennai Chapter* and life member of *National Society of Fluid Mechanics and Fluid Power (NSFMFP)*.

Moreover, following my work experience I took my career forward as a research assistant and graduate teaching staff in Khalifa University, Abu Dhabi, UAE. During this tenure I had extensively worked on funded research projects and under a mixed cohort of postdoctoral, undergraduate and masters students in a top notch research environment.

I want to pursue my career in your Oklahoma State University (OSU) because I am very ambitious to take my career forward in Professor Dr. Suo Yang research group. I am impressed with the research undertaken in your university especially in computational fluids and turbulence modelling. Hence, I find myself an ideal candidate to join this research group as my academic background specific to Computational Fluid Dynamics(CFD) is in close relation to the research activities in the group.

I believe that I have the aptitude, resilience, mental stamina, requisite knowledge, and creativity to pursue a career in scientific and engineering research. I feel strongly that I have a lot to learn from the ever-green field of Aerospace Engineering and looking forward to get started with my post-graduate research with a research assistantship or a fully funded scholarship.