

Motivation Letter On Pursuing Advanced Manufacturing As Major In Graduate Studies

Posted on September 19, 2018

Interest in Advanced Manufacturing

I have been curious about giant industrial systems and how they are managed right from my school days. From food processing to manufacturing Air Buses, making bicycles to assembling the world's fastest cars, all this not only fascinated me but also surprised me as to how they do it. No wonder these marvels were made possible by automated systems that have been regulated in advanced manufacturing industries. This curiosity has cultivated my interest to take Advanced Manufacturing as my major in my graduate studies. (National Institute of Standards and Technology, n.d.)

Academic Foundation in Mechanical Design

The course Machine Design and CAD as part of my bachelor's study enormously fascinated me since its start. As the semester progressed, I became really obsessed with Mechanical Design, Simulation and Concept Development. Since then, I have started solving problems in product design and development, especially in manufacturing. I assisted a local firm in setup up plasma-cutting CNC machines for sheet metal cutting and trained a couple of operators with AutoCAD and SheetCAM. I was also involved in the reverse engineering of the Concrete Batching Plant and successfully prepared CAD design and fabrication drawings of it.

Technical Certifications and Engineering Skills

Being a self-motivated and keen learner, I have achieved various certifications as well. I am a Certified Solidworks Professional (CSWP) and a well-trained engineering simulations expert certified by Cornell University. I also have good mathematical and programming skills, which are very helpful in designing efficient systems. I have hands-on experience with state-of-the-art mechanical modeling and analysis tools such as SOLIDWORKS, ANSYS, and MATLAB.

Teaching Freelancing and Professional Experience

Because of my strong skills in CAD software, I was asked to join NFC IET, Multan, as a Lab Engineer and the Head of the Department right after my graduate studies. (Purdue Online Writing Lab, n.d.) For the very first time in university, I introduced an online learning management system to the students,

which helped in better communication and improved learning experiences for the students. The desire to work with foreign people pushed me to start freelancing where I got the unique experience of solving challenges being faced in the industry by incorporating innovative solutions. Currently, I am working on UP WORK GLOBAL INC. as a freelancer, where I am providing services for engineering product design and product performance analysis using the latest CAD and CAE systems.

Personal Qualities and International Adaptability

I am an open and flexible person with a strong enthusiasm for learning new things. I can easily adjust to a diversified environment and have no issue learning in a different country, as I enjoy traveling and meeting new cultures. I accept diversity, and that is why I am interested in working with people having different cultures. Key traits in my personality include a highly motivated, confident, energetic, accountable, and result-oriented nature acknowledged for integrating creativity and teamwork, as well as the potential to work independently in order to yield optimized solutions. My exploring and learning attitude is the key to my professional confidence and behavior.

Motivation for Centrale Nantes

My decision to enroll in Additive Manufacturing at Centrale Nantes is greatly influenced by my core interest in computer-aided designing and numerical simulations. I am applying to carefully review the course curriculum. Courses like Numerical Methods, Structural Mechanics, Computer-aided Design, Mechanical Design, and Virtual Reality in Product Development clearly align with my academic background and professional experience. Since the current researchers in Additive Manufacturing, Numerical Simulation, and High-Performance Computing complement my research interests and requirements, I believe that being an MS student in your prestigious institute would not only empower my career development but would give me the framework to utilize my full potential.

Yours sincerely,

Adam

References

National Institute of Standards and Technology. (n.d.). Advanced manufacturing.

<https://www.nist.gov/topics/advanced-manufacturing>

Purdue Online Writing Lab. (n.d.). Writing the personal statement.

https://owl.purdue.edu/owl/job_search_writing/preparing_an_application/writing_the_personal_statement/index.html