June 28th, 2020 - AR-15 / Pistol Design Engineer - Palmetto State Armory

To whom it may concern:

My name is Heyward Smith and I recently graduated from the Georgia Institute of Technology in May with a B.S. in Industrial Design. I was recently browsing the PSA website with the intent to purchase a firearm and was very excited to see open positions available for an AR-15 Design Engineer (West Columbia) and Pistol Design Engineer (Summerville).

In reading through the requirements I noticed an emphasis on mechanical aptitude and experience. I admit that while I have not had the requested three years of work experience, I have had exposure to many of the principles of mechanical design mentioned, such as dimensioning, tolerancing, manufacturing methods, material analysis, etc. in my academic studies. As I hope I demonstrated in my work samples (Portfolio: heymac.github.io), I have also had experience with parametric modeling software (Solidworks, Fusion 360) and have used it to model, prototype, and document multi-part products intended for manufacture. I have recently worked with two graduating mechanical engineers and other designers on a five-month long project to design and produce a functioning driving simulator (Covid-19 prevented us from assembling it in the last months). For this project I completed tasks such as performing market research to find solutions and opportunities undiscovered by competitors, generate concepts, testing with users, and assisting team members with mechanical design, evaluation, and part procurement.

Through this experience and other projects, I have learned how effective teams of engineers and designers can leverage different skills and abilities to create completely new products. In my recent personal research of the AR platform I have obtained a decent working knowledge of the operation of rifles and handguns which I am eager to expand, and I am excited to learn more about the processes that go into their manufacture. Any deficiencies I may have in hard skills I intend to compensate for with diligence and determination. I appreciate your consideration for either of these positions and look forward to discussing this opportunity further. Thank you.

Sincerely,

Heynard Smith