Sebastian Baldini

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To Whom It May Concern,

I am interested in applying for the Robotic Systems Integration Engineer at Formlabs as my mix of undergraduate and graduate robotics courses along with experiences with a large variety of 3D printing technologies uniquely qualifies me for this position. I am currently a senior Robotics Engineering major at Worcester Polytechnic Institute and will be graduating in May of 2025.

My experience with my research positions over the last two years both at WPI's Robotics Materials Group and now in the Soft Robotics Lab under Professor Cadgas Onal has given me invaluable experience in mutli-material FDM printing with E3D and Prusa machines. Primarily I used these machines to develop robots using multiple TPU filaments that ranged in both shore hardness and conductivity for novel encoding applications, of which I'm currently moving for a journal paper on the subject. Beyond this, my internship experience from this past summer with Sig Sauer got me hands on with Fuse 1+ printers for mechanical components. While I was at Sig Sauer one of my tasks was the management and consulting on these printers for those who were less familiar with the technology. This mix of experience developing products and robots with these machines has developed by understanding of this technology and the materials used to a great depth that I would be very interested in further improving on in the future. This applies especially to the carbon and copper infused filaments that I use in my research which, while not currently available in a SLS format, could be an interesting material to continue development with.

Beyond my 3D printing development experience, my Robotics Engineering degree has given me substantial experience with hardware and software integration through in and out-of-class projects. I am very comfortable developing within both a Windows and Linux environment as I have used both for a variety of projects, such as robotic arm programming for graduate robotics courses, computer vision software development for Sig Sauer's testing and evaluation teams, and autonomous drone programming for my Major Qualifying Project.

I firmly believe these experiences have equipped me to be an excellent fit for this position and would love the opportunity to further discuss what I can bring to the role. Thank you for your time and consideration. I look forward to speaking with you in the near future.

Sincerely,

Sebastian Baldini