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Director of Personnel
Worcester Polytechnic Institute
100 Institute Road
Worcester, MA 01609-2280

Re: Foisie Innovation Studio Makerspace Manager Position

Dear Director:

I wanted to learn more about the Foisie Innovation Studio Makerspace Manager Position at WPI, which I saw posted online.

I teach computer science and robotics at St. Mark's School in Southborough, MA, and I have been working to help develop St. Mark's maker space programming at the St. Mark's "Fab Lab" since St. Mark's began working with maker space technologies and ideas. I have been involved in the purchase and set up of all laser cutting, 3D printing and Carvey machines at St. Mark's. In 2014-15, I served as the faculty representative on the Planning Committee for St. Mark's STEM Center, which included planning for the Fab Lab.

I love working with DIY technologies and have worked at St. Mark's to spread Fab Lab knowledge to the faculty and students. At St. Mark's, I have offered classes in laser cutting and 3D printing, showing teachers workflows through software like Inkscape and Adobe Illustrator (for 2D) and TinkerCAD, SketchUp, OnShape and Autodesk Inventor (for 3D designing). I have taught students the fundamentals of 2D and 3D design in different "New Media" and "Saturday Classes" which St. Mark's offers through its Saturday program.

I have worked with engineering and design problems with students both in class and as a mentor of St. Mark's FIRST Robotics Team. We are in the FRC division and through that work I have gained good experience in working with aluminum and steel (cutting and milling), and I have learned to organize, manage and maintain a busy shop. In the summers and on a part time basis, I have also taught programming and DIY tech to students of 6-8th grade ages at the i2 Summer Camp program and also at The CoderSchool, in Natick MA.   I have also attended FIRST Robotics workshops and classes at WPI, though it's explorer program. Brad Miller of

WPI has been a good friend and colleague to St. Mark's Robotics and we have had great experiences with Brad and the other educators at WPI.

I have a computer science degree from Dartmouth College and a bachelor's degree in illustration from the Rhode Island School of Design. I feel I could be a good contributor to the maker space community at WPI, because I am passionate about DIY work and I think working in the "Fab Lab" at my school is one of the best parts of my job.

It would be great to have a chance to discuss the Maker Space Manager position with you. I believe my application is complete on the WPI site, but if there are any further materials you need, please let me know.

Very truly yours,

Christopher Roche
Teacher, Computer Science and Robotics
Mentor, FRC Team 3566 ("Gone Fishin'")
Mentor, FLL Teams 16165, 20858 ("Can of Worms")
St. Mark's School
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