

Matthew Fredrick

Software Developer

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OBJECTIVE

I am looking to leverage the skills and experience from my engineering career to tackle new challenges in software development and continue to build on a solid knowledge base in a field that pushes me to learn and innovate.

SKILLS

JavaScript	MATLAB	HTML/CSS	Python	C++	Front End Dev
Git	Java	DAWs	MIDI	3D CAD	Responsive Design

EDUCATION

BS Mechanical Engineering (GPA 3.58) **Worcester Polytechnic Institute** **2013**

Relevant Coursework: MATLAB/Octave algorithm development and programming for iterative design calculation and signal processing; Java OOP, GUI, debugging; engineering testing and data processing from hardware sensors

EXPERIENCE

Inventor Drafting and Automation Specialist **Ipswich Bay Glass** **2018**

Pioneered programs and algorithms to begin automating drafting workflow in Autodesk Inventor to support migration from AutoCAD and manual workflow. Implemented solutions using Inventor API/iLogic, VB.NET, and Excel macros to reduce time to production.

Design Engineer **SARC Global Inc.** **2017-18**

Managed R&D projects from conception to prototype. Used data analysis, cost-tracking, and documentation to maximize profitability and effectiveness of designs. Developed 3D models using Solidworks and created prototypes with additive manufacturing technology. Created the documentation for products and processes under development and maintained records of revisions and changes.

Solutions Engineer **Vacuum Technologies Inc. (VTI)** **2014-2015**

Led technical operations for the organization's first North American outpost. Assisted in PLC machine control GUI development for English language users. Debugged and improved PLC algorithms. Wrote and edited technical documentation including the English language product operation manual for a product line, engineering and troubleshooting guide for service technicians, and the North American web page for an international equipment manufacturer. Provided remote and on-site support and troubleshooting.