Matthew Geib

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Education:

- **Major: B.S.,** Computer Science and Engineering, University of Nevada, Reno 2017
- **Embedded:** Microprocessor system design, embedded game dev., networks, RTOS
- **Programming:** Data structures, algorithms, operating systems, machine learning, computer vision

Employment:

Hyster-Yale Group

Embedded Software Engineer, June 2018-Present

- Control Software: High level control system software(Simulink/Matlab) for forklifts that controls vehicle and hydraulic movement, lights, sounds, error(fault) states, and low level communication.
- Firmware: Low level code (C) for controller application level and bootloader.
- UI/Display: Application level code(Lua) for forklift user display that interfaces to the main controller. User interface storyboard for the display and internal/external tool UI design(WPF).
- Tools: Internal/external tool code(C# and Python) for interfacing to controllers, generating config data, and autogeneration of code.
- Build and Testing: Integration of various code bases with Jenkins for build automation and unit testing.

Skills:

- Programming languages: C/C++/C#, Python, Simulink, MATLAB script, Lua
- Software: Keil µVision, Visual Studio, Crank Storyboard, Simulink/MATLAB, Perforce Helix QAC, Jenkins, Microsoft Office, Agile PLM, Creo PTC CAD, KiCad EDA, Adobe Design Suite, Xilinx ISE
- Operating Systems: Windows, Linux, Embedded Linux, Mac OSX, ROS(Robot Operating System)
- Embedded Systems/Firmware: 8-bit ATmega, 32-bit ARM, RTOS-Keil RTX and µC/OS-II, CANopen, I2C, SPI, UART, DMA, debuggers, oscilloscopes, digital logic analyzers.