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| **SUMMARY** |
| Software developer experienced in the areas of embedded software planning and development. |
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| **WORK EXPERIENCE** |
| **Embedded Software Engineer at Gentex (May 2012 – present)**   * Designed, implemented, and tested embedded software for several products and OEMs. * Integrated CAN communication, electrochromic dimming, lane departure warning, traffic sign recognition, Smartbeam, TCP/IP functionality into customer projects. * Developed software that interfaces with a third party vision processing module, and used the resulting information for internal algorithms. * Participated in the development of an OSEK compliant operating system developed for internal projects. * Brought up and maintained a new hardware system consisting of a dual core ARM Cortex A9 microcontroller with attached FPGA fabric, which is used for algorithm development and analysis. Development included a bootloader, Ethernet, FPGA programming, watchdog, and SPI drivers, and application code to support the processor, the FPGA, and the algorithms running on the target.   **Software Project Manager at Gentex (March 2011 – May 2012)**   * Managed the requirements, development, and testing of software developed for several rear view mirrors and OEMs. * Worked directly with OEMs on project definition, project status, and issue resolution. Travelled to Japan, UK, and Mexico to support these activities.   **Faculty at Calvin College (2010)**   * Taught a Circuits Analysis and Electronics lab.   **Project Manager at DornerWorks (November 2009 – March 2011)**   * Project manager for aerospace and automotive customers. Worked with customers on defining projects, project status, and issue resolution. * Managed teams doing DO-178B structural coverage analysis and requirement based testing of several features of a VxWorks RTOS. * Managed teams doing requirements, development, and testing of software for several automotive products.   **Technical Lead at DornerWorks (September 2008 - November 2009)**   * Technical lead for select projects of an aerospace customer. Participated in project definition, regular status meetings, and issue resolution with the customer. * Led a team that developed 1500+ DO-178B Level A requirement based tests for 220+ requirements for a VxWorks RTOS Ethernet driver. Also the tests to a secondary, cheaper and more available, hardware testing platform. * Led a team that performed DO-178B Level A verification of 100+ problem reports.   **Embedded Systems Engineer at DornerWorks (April 2006 – September 2008)**   * Embedded hardware and software design, development, and test for customer projects. * Developed a DO-178B Level A compliant hardware support software for a VxWorks RTOS used for flight controls. * Developed the hardware and software for an electronic fan speed controller and wireless remote control.   **Intern at Smiths Industries Aerospace (now GE Aviation) (March 2005 – March 2006)**   * Used C, National Instruments TestStand, and LabWindows to write test software to test aerospace products. |
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| **COMPUTER PROFICIENCIES** |
| *Programming Languages*   * *Proficient:* C * *Familiar with:* Ruby, C++, X86/ARM assembly, VHDL, Verilog |
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| **EDUCATION** |
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