

# ANDREW P. MAURAGIS

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## SUMMARY

A skilled embedded systems engineer with six years of experience ranging from RTOS applications to camera system validation. Articulate, excellent analytical skills, results driven, and focused on continuous improvement.

## EXPERIENCE

### Camera Systems Engineer

January 2015 to Present

Electronic Design Intern

May 2012 to August 2012

*Gentex Corporation — Zeeland, MI*

- Designed experiments to analyze and improve camera production yield reducing scrap volume by 5%
- Developed and automated test systems for focus, color, and parametric performance for internally developed cameras and launched a continuous integration process with historical tracking for the software
- Integrated new cameras with custom in-house framegrabber
- Designed and supported launch of custom lens aligner (for camera assembly)

### Embedded Software Engineer

July 2013 to December 2014

*Precisive — Woburn, MA*

- Developed, integrated, and tested real-time analyzer firmware in C++ in QNX and on bare-metal
- Implemented a controlled manufacturing release deployment system tied to version control
- Designed an on-instrument unified diagnostic system for collating and reporting health and error data
- Provided integration and manufacturing support for software testing

### Oculus-ASR Engineer (Undergraduate Capstone)

August 2009 to May 2013

*Aerospace Enterprise, Michigan Technological University — Houghton, MI*

- Managed a communications sub-team of nine students as a project team leader
- Designed and implemented an RF (Amateur Band) communication system for satellite telemetry, command, and control
- Oversaw development of VxWorks driver for radio/flight-computer interface
- Redesigned satellite battery solar charge controller

### Test Equipment Hardware Design Engineer

July 2010 to June 2011, August 2011 to May 2012

*GE Aviation Systems — Houghton, MI*

- Designed avionics functional board test equipment at the box and board level
- Integrated functionality tests by debugging test software and diagnosing problems in hardware
- Documented hardware development plans and lifecycle documents, including requirements verification and peer design review

### RF Engineering Intern

June 2011 to August 2011

*Orbital Sciences Corporation — Dulles, VA*

- Developed test plans for the acceptance and qualification of an S/L-Band antenna
- Drafted requirements for a multi-program radio ground support test rack
- Designed a NEC model for a high-gain monofilar helical antenna to meet specific size and radiation pattern requirements

## EDUCATION

### B.S. Electrical Engineering and Computer Engineering

August 2008 to May 2013

*Michigan Technological University — Houghton, MI*

GPA: 3.62/4.00

## TECHNICAL SKILLS

- Software Development (C, C++, Java, Python, Assembly, MATLAB, LabView)
- Version Control (Git, SVN)
- Embedded Experience (ARM, AVR, QNX on ARM)
- Schematic Capture/PCB Layout (Mentor, Eagle)
- Electronic Design
- Engineering Statistics (DoE, t-testing, Gage)
- Hardware/Software Integration Experience
- Technical Documentation (MS Office, L<sup>A</sup>T<sub>E</sub>X)
- Capable with Windows, Linux, Mac OSX