# Ivan Eduardo Guerra

#### Permanent Address:

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## Education

## University of Oklahoma: Norman, OK

#### B.S. Computer Science

- **3.96**/4.00 Cumulative GPA
- Mathematics Minor
- Spanish Minor (Bilingual)

#### **Contact Information:**

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Alternate E-mail: Ivan.E.Guerra-1@ou.edu GitHub: www.github.com/ivan-guerra

- Lean/6 Sigma Green Belt Certified
- University of Oklahoma Honors College

# Professional Experience

## Raytheon - Space and Airborne Systems

June 2017 - Present

## $Electro-Optic/Infra-Red\ Pod\ (EOIR)\ Software\ Engineer$

- Increased EOIR C++ test coverage from 22% to 35% by integrating the gcov source code coverage tool into the EOIR build system.
- Discovered numerous memory and threading errors in the EOIR C legacy codebase by using the Valgrind Memcheck/Helgrind tools, leading to an effort by the EOIR software team to correct the errors prior to proceeding with product development.
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## ExxonMobil - Data and Information Systems

May 2016 - August 2016

Graduation Date: May 2017

## Manufacturing and Supply Applications Engineer

- Automated the process of optimally loading chemical cargo aboard vessels by applying dynamic programming techniques, leading to a 20 hours per week time savings.
- Reduced the frequency of chemical cargo contamination by implementing a Java user interface to assist engineers in accurately managing cargo data.
- Applied user-centered design techniques to create a software requirements document providing a base set of requirements for continued product development.

# Northrop Grumman - B-2 Defense Management Systems

January 2015 - August 2015

# B-2 Display Systems Software Engineer

- Discovered and removed software defects in the Platform Systems Tools C++ source code using the GNU Debugger and Valgrind Memcheck, saving software quality assurance engineers over 30 hours of testing.
- Increased Platform Systems Tools C++ test coverage from 60% to 68% by implementing over 30 C++ unit tests using the Google Test library.
- Improved the B-2 display system team's API documentation by writing C code snippets demonstrating the intended use and functionality of each method.

## Skills

- Languages: C++ (proficient), C (proficient), Java (competent), Python (competent), Bash (competent)
- Testing Tools: Google Test, GNU Debugger, Valgrind Memcheck/Helgrind, Gcov
- Version Control Software: Git, Subversion
- Platforms: GNU/Linux, JIRA, Jenkins CI, Salesforce, Windows 7/10
- Experience performing Agile software development using the Scrum framework.
- Effectively communicate technical specifications and challenges to professionals in non technical domains.
- Enjoy teaching / tutoring others.