# **Julian Anthony Brackins**

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### **Education**

South Dakota School of Mines & Technology (Class of 2015)

### 3.19 GPA

Earning BS in **Computer Science** 

Programming Experience: C/C++, Visual Basic, Assembly Language (AVR), Java, PHP, Pvthon

SDSMT Orchestra 2<sup>nd</sup> Violin Section Leader

KTEQ DJ on kteq.org

KTEQ Assistant Station Engineer

# **Computer Science Experience**

*Software development tools:* 

Profiling tools (**gprof**), debuggers (**gdb**, **Valgrind**), Experience in coding both in Linux and Windows (**gedit**, **VIM**, **Visual Studios**), Code optimization and algorithm analysis timings and simulations, version control (**SVN**, **Eclipse**) NASA Integrated Test and Operations Systems (**ITOS**), NASA Core Flight Software system (**CFS**).

## **Employment Experience**

# NASA Johnson Space Center, Houston, TX (January 2013 - April 2013)

JSC Spacecraft Software Engineering Branch.

Member of the Cabin Flight Software Team responsible for designing and developing the Core Flight Software (CFS) system that controls the 2B version of the Multi-Mission Space Exploration Vehicle (MMSEV) cabin.

- Developed a ground display for monitoring MMSEV Thruster firing activity.
- Developed a CFS application for interfacing with the MMSEV Potable Water System (PWS) through a Web Relay connection.
- Assembled and tested the initial On-Board Display Hardware configuration that supports the software test environment.

Member of the Active Debris Removal (ADR) Software Team designing and developing the software system that controls and integrates the components of a prototype vehicle designed to identify and capture orbital debris.

- Modified the existing software load (C code) to increase efficiency of IMU and pressure transducer processing.
- Wrote software to cyclically log time-tagged test data for post-test analysis.

## Target, Rapid City, SD (July 2010 -Present)

Electronics Salesperson. Utilized teamwork and technological knowledge to drive sales.

# Black Hills Symphony Orchestra, Rapid City, SD (Fall 2008 - Present)

2nd Violinist. Started out 10th chair, recently promoted to 4th chair. Attend weekly rehearsals for the 5 symphony concerts each year.

#### References Available on request.