

# Ryan Truran

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## Work Experience

### **Texas Instruments – RFAB**

**Richardson, TX**

#### **Facilities Control Engineer II**

**Sep '17 - Present**

- Resolved bugs in both user interface and control logic.
- Performed troubleshooting of toxic gas detectors and determined root cause.
- Wrote software for detecting bad signals on Gas Analyzers. (parsing data and storing in memory) (C++)
- Designed Process and Schematic for bypassing hardwired shutdown of H2 Analyzers
- Provided cost Estimates of Life Safety Tooling Design.

### **OrbitalATK – Propulsion Systems**

**Salt Lake City, UT**

#### **Process Control Engineer II**

**Mar '15 - Sep '17**

(Automation, Machining, Dissection, 3D Carbon-Carbon, Additive Manufacturing.

- Wrote back-end software for AGV Problem Report Generation. (C++ and SQL)
- Developed proof of concept for replacing existing AGV controller with wireless Xbox Controller. (Python)
- Designed and Enhanced User Interfaces (HMI's) for usability in the following languages: SQL, C, C++, Java.
- Modified Process controllers using the following languages: Ladder Logic, Structured Text, and Function Block.
- Designed and Implemented Paging System using C++, C#, and SQL.
- Used git daily and introduced others to its power.
- Reduced errors on Automated Guidance Vehicle systems by 50% by determining root cause and implementing countless corrective actions for software, hardware, and training.

## Education

### **Bachelors of Science in Mechanical Engineering**

#### **University of Texas in Arlington**

- Engineering GPA: 3.4
- Cumulative GPA: 3.2

## Technical Skills

- Proficient with Python, Java, C, C++, Ruby, Javascript, and SQL.
- Familiarity with SCADA, OPC Server, and Modbus.
- Experience managing small projects from creation to completion. (See Projects Section)

## Special Projects

### **EMR Website (on Bitbucket private repo)**

**Jan '18**

(Personal Project)

- I am currently developing a web site that will hopefully be used by many individuals looking to maximize the health care experience.
- Speaking in terms of architecture, this site uses SQL, Express 5 (MVC Framework), Handlebars (yes I'm using a view engine and not React/Angular), and Node (obviously).

## **IOT Garage Door Opener**

**Dec '17**

(Personal Project)

- I utilized a relay module, Raspberry Pi, and Apache WebServer to control my garage door from my phone. I did this project one night to learn a little more about PHP, MQTT, and Node-Red.

## **Custom Conductive Filament Development**

**Aug '16 - Dec '16**

(Orbital ATK – Internal Research and Development Project Lead)

- An electrically conductive material was needed to replace non load bearing metal components due to the inherent static risk around solid rocket propellant explosives
- Conductive constituents were blended with plastic to produce conductive filament
- Electrical Resistance Testing was performed to verify conductivity, 80 kΩ/square for Conductive Filaments and 8.1E8 ohms/square for Static Dissipative Filaments
- Provided monthly budgetary updates to senior management

## **TimeCardCop**

**Nov '15 - May '16**

(Personal Project – iOS App)

- Government contracting employees are contractually required to keep time cards up to date with annoying accuracy.
- Coworkers were often failing internal time card audits.
- Developed an iOS application to allow coworkers to keep their time cards up to date more easily.
- This app has been widely used across the company and has reduced the number of failed audits immensely.
- GUI needs an overhaul but my MacBook is dead.

## **Mobile Autonomous Weaponry System**

(Senior Design Project, UTA – Team Lead)

- Developed a custom autonomous NERF firing weapon with locating, tracking, and firing capabilities, along with a GPS controlled testing platform.
- GPS and firing mechanism were tested in an outdoor environment to prove itself as functional.
- Designed circuitry and developed code (Visual Basic) for firing system
- Managed small team from creation to completion
- Completed on time and under budget.