▪ **Víctor Rivera /** Systems Engineer

Work Experience

BAE Systems Inc. – Sterling Heights, Michigan

Title: Principal Systems Engineer

❖ **Systems Engineering – Bradley Fighting Vehicle (*Jan 2019 – Present*)**

- Lead systems engineer for Bradley vehicle Active Protection Systems (APS) programs
- Perform earned value analysis
- Develop and maintain vehicle system and subsystem level requirements using IBM DOORS
- Propose system design changes
- Develop systems engineering documentation:
  - System Specifications
  - System/Subsystem Design Description Documents
  - Interface Control Documents
  - Requirements Compliance Assessment
  - Product Change Requests
  - Engineering Change Proposals
  - Final Inspection Records
  - Factory Workarounds
  - Requirement Compliance Variances/Waivers
  - White Papers
  - Work Instructions
  - Bill of Estimates
- Host formal work product peer review with other engineering groups and relevant stakeholders
- Prepare work products for final delivery
- Participate in Preliminary Design Reviews (PDR) and Critical Design Reviews (CDR)
- Support transition into Model Based Systems Engineering (MBSE)
- Mentor New Hires

❖ **Obsolescence Management – M88 Recovery Vehicle (*Mar 2018 – Jan 2019*)**

- Assessed vehicle's bill of materials for components obsolescence
- Identified alternate components and developed solutions using AVCOM (obsolescence management tool)

FEMA/Vanguard

❖ **Housing Inspector in Puerto Rico after Hurricane Maria (Jan 2018 – Feb 2018)**

Pratt and Whitney (Formerly I.A.S Inc.) – Isabela, Puerto Rico (Jan 2012 – Jun 2016)
Title: Specialist I (Systems Engineer)

- **P&W NGPF Engines – Thrust Reverser/Sensors/Actuators (*Jan 2013 – Jun 2016*)**
  - Developed and maintained system, subsystem and software level requirements using IBM DOORS
  - Implemented software solutions based on requirement updates using MATLAB/Simulink
  - Prepared Simulink model-based software for delivery
  - Created design change requests
  - Hosted formal work product peer review with other engineering groups and relevant stakeholders
  - Participated in Preliminary Design Reviews (PDR) and Critical Design Reviews (CDR)
  - Performed rapid prototyping tests using P&W proprietary scripting language
  - Used Unigraph to record and plot test results of scripted test routines
- **Kidde – AFES Black Box Testing (*Jan 2014 – Dec 2015*)**
  - Updated hardware functional requirements and traceability using IBM DOORS.
  - Developed hardware test cases
  - Setup electronics testing laboratory based on test case requirements and in compliance with customer defined standards
  - Completed black box hardware testing and generated test reports

- **P&W F135 Engine – Prognostics / Health Management (*Jan 2012 – Dec 2012*)**
  - Created design change requests
  - Developed and maintained system and subsystem level requirements using IBM DOORS
  - Implemented software updates design using Picture-to-code (PTC) software
  - Hosted formal peer reviews with other engineering groups and relevant stakeholders
  - Prepared Simulink model-based software for delivery

Certifications/Skills

- Passed Fundamentals of Engineering (FE) test (October 2012)
- Passed Professional Engineering (PE) test (October 2016)
- Certified Engineer in Training (EIT License Number 27459
  Issued by The State Department of the Commonwealth of Puerto Rico)
- Software Experience: IBM DOORS, JIRA, MATLAB, Simulink, AutoCAD, Sketchup, Tortoise SVN Repository, National Instruments Multisim, PSpice, Arduino IDE, Picture-to-code (Pratt and Whitney proprietary), MS Office, Visual Studio (C code) and MagicDraw
- Company Sponsored Training: Altium Designer, MIT Online Course - Model-Based System Engineering, BAE Systems - SysML/MagiDraw Training, Vector - CAN j1939, and Vector - CANalyzer
- Languages: Spanish (Native) and English (Fluent)
- Familiarity with Digital Oscilloscopes, Handheld/Bench Multimeters, Arbitrary Wave Generators, Bench Variable Power Supplies, and soldering
- Familiarity with ITAR and EAR regulations
- Ability to obtain security clearance
- Adaptable, Collaborative, Communicative, Proactive, and Committed

Education

- Institution: University of Puerto Rico, Mayagüez Campus (ABET accredited university)
- Graduation Date: June of 2012
- Degree: Bachelor of Science in Electrical Engineering

Extracurricular Activities

- 3D modeling using AutoCAD and Sketchup Pro
- Prototyping using Commercial FDM 3D Printers
- Programming Arduino and Parallax microcontrollers for personal electronics projects